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ABSTRACT

A practical system for producing a union catalog of titles in the collections of the Library of Congress Division for the Blind and Physically Handicapped (DBPH), its regional network, and related agencies from a machine-readable data base is presented. The DBPH organization and operations and the associated regional library network are analyzed. The major objectives of the proposed system are defined as improved bibliographic control over materials acquired by DBPH and the network libraries and improved management control. To meet these objectives, DBPH Bibliographic Information System design contains three subsystems: (1) an in-process system, (2) a union catalog system, and (3) a management information system. Hardware, software, and support requirements are assessed as part of a three-year plan for implementation. Appendixes include detailed work flow diagrams for current DBPH functions, a structured interview sheet used on site visits, and detailed calculations of production costs for the union catalog in book and microfiche form. (Author/PF)

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## FINAL REPORT

# DESIGN OF AN AUTOMATED LIBRARY INFORMATION STORAGE AND RETRIEVAL SYSTEM

FOR

LIBRARY OF CONGRESS

DIVISION FOR THE BLIND AND PHYSICALLY HANDICAPPED (DBPH)

CONTRACT NO. LC-1099

June 30, 1975

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GLOSSARY OF SPECIAL TERMS

# SECTION I

# INTRODUCTION

## 1.1 OBJECTIVES AND SCOPE OF THE STUDY

This study has a twofold objective:

1) To design a practical system for producing from a machine readable data base, a union catalog of titles in the collections of the Library of Congress Division for the Blind and Physically Handicapped (DBPH), its regional library network, and related agencies.

2) To define a realistic plan for implementing the design.

The first objective assumes that the most efficient method for producing a union catalog, given today's technology, is through the use of a computer. Secondly, it assumes that a union catalog of holdings of the DBPH network is an essential and fundamental step in the overall goal of increasing the effectiveness of service to the blind and physically handicapped.

An important consideration in defining the objectives and scope of this study is the reference to a "practical system design." This system design should be based on an accurate picture of the DBPH and network library operations including, among others, current procedural flows, material resources available, etc. Sections II and III explain the operations of DBPH and the regional network.

The system design should encompass the bibliographic process, from the point of selection to the production of the DBPH Union Catalog. The overall goal of the system is to permit growth and improved services without a proportional increase in cost and manpower requirements. This goal will be achieved by accomplishing two facilitating objectives. The first objective is to improve the bibliographic control over materials acquired by DBPH and the network libraries. Improved bibliographic control will serve to increase the accessibility of the total collection and maximize the use of available resources. The second objective of the system is to improve management control, particularly in the case of copyright clearance. The system, therefore, has to provide for the timely issuance of reports that provide information useful to management.

In meeting the requirements described above, the system design should take into consideration available technical and human resources. A practical system design must be usable, cost effective, and feasible.

The second objective of this study is to define a realistic implementation plan. Implied in the implementation plan is a description of the necessary tasks for the production of the desired outputs, including their sequence and schedule. It must consider the fiscal and human resources available or likely to become available, and allow for contingencies, staff training, and other considerations that affect scheduling.

As defined by the objective of the study, the primary focus is the union catalog. However, the production of a union catalog coincides at numerous points with other DBPH operations, as well as with operations of network libraries. For example, the bibliographic record of a title is first captured at the point of selection and is modified during the process until the complete and authoritative record is defined during cataloging. Therefore, this study examines the overall operations within the DBPH network.

## 1.2 BACKGROUND

As present DBPH operations are the parameters of this study, this introductory section addresses the organization of the library network serving the blind and physically handicapped and covers the technical developments that preceeded the system study, which are expected to impact the recommended system design.

### 1.2.1 Organizational Considerations

#### 1.2.1.1 DBPH Legislation and Mission

The concept of a National Library for the Blind was developed in 1897, by John Russell Young, then Librarian of Congress, when he established a reading room for the blind and a collection of about 500 books and music items in raised type.

On April 27, 1904, a law was passed "to promote the circulation of reading matter among the blind." It provided for free mailing privileges for embossed reading matter. In 1913, Congress provided that one copy of each book in raised type made for educational purposes under Government subsidy by the American Printing House for the Blind in Louisville, Kentucky, was to be deposited in the Library. Other materials were acquired by gift and purchase. Services, too, were expanding; instruction was available for those desiring to learn reading by touch; displays were arranged; plans were developed for exhibiting products made by blind persons.

1.2.1.1 continued

On March 3, 1931, the concept of a network of libraries serving the blind was first established by the passage of the Pratt-Smoot Act. It provided an annual appropriation of $100,000 to the Library of Congress "... in addition to appropriations otherwise made to said library,... [to be used by] the Librarian of Congress to provide books for the use of the adult blind residents of the United States, including the several States, Territories, insular possessions, and the District of Columbia." It also provided for arrangements with "... such libraries as [the Librarian of Congress] may judge appropriate to serve as local or regional centers for the circulation of such books..." for adult blind. In 1933, the law was amended to books "... published either in raised characters, on sound-reproduction records, or in any other form", thus allowing records, cassettes, etc., to be included in the collection. Children became eligible for this service in 1952, by the deletion of the word "adult".

In 1957, the ceiling was removed from the annual appropriation for the free library service for the blind. At the same time legislation was passed providing for preference to "non-profit-making" institutions or agencies, regarding contracts for production of books (PL 85-308).

The music library for the blind was established in 1962, under a separate ceiling-free appropriation (PL 87-765).

In 1966, both the Pratt-Smoot Act and PL 87-765 were amended by PL 89-522 to include persons with physical handicaps precluding the reading of ordinary print. PL 89-511 (1966) appropriated additional funds for the development of regional facilities, and set standards of eligibility for state and local facilities to be developed under the act.

The official statement of the mission of DBPH is set forth in the Federal Register (June 30, 1970) as follows:

- "Program. In connection with the Library's program of service under the act of March 3, 1931 (46 Stat. 1487), as amended, its Division for the Blind and Physically Handicapped provides books in raised characters (braille), on sound reproduction recordings, or in any other form, under regulations established by the Librarian of Congress. The Division also provides and maintains reproducers

1.2.1.1 continued

for such sound reproduction recordings for the use of blind and other physically handicapped residents of the United States, including the several States, Territories, Insular Possessions, and the District of Columbia, and American citizens temporarily domiciled abroad."

- "Loans through regional libraries. Sound reproducers are lent to individuals and appropriate centers through agencies, libraries, and other organizations designated by the Librarian of Congress to service specific geographic areas, to certify eligibility of prospective readers, and to arrange for maintenance and repair of reproducers. Libraries designated by the Librarian of Congress serve as local or regional centers for the direct loan of such books, reproducers, or other specialized material to eligible readers in specific geographic areas. They share in the certification of prospective readers, and utilize all available channels of communication to acquaint the public within their jurisdiction with all aspects of the program."

- "National collections. The Librarian of Congress, through the Division for the Blind and Physically Handicapped, defines regions and determines the need for new regional libraries and deposit collections in cooperation with other libraries or agencies whose activities are primarily concerned with the blind or physically handicapped. The National Collections located in the Division for the Blind and Physically Handicapped ...[provides] services to other libraries, and to blind and physically handicapped readers anywhere in the nation requiring specialized materials. It serves as the center from which books, recordings, sound reproducers, and other specialized materials are lent to eligible blind and physically handicapped readers who may be temporarily domiciled outside the jurisdictions enumerated by the act."

1.2.1.1 continued

As a result of this legislative action and expanded interpretation of existing laws, the basic mission of DBPH is to provide books, magazines, and the appropriate machines to persons who qualify because of a visual or physical disability that prevents them from utilizing regular printed materials. DBPH implements this mission by carrying out the following activities.

- Collection Development: Selection of appropriate book and magazine titles for the network and DBPH collections.
- Publications: Production of publications and informational material to publicize the service and keep patrons informed of available material.
- Reference Services: Maintenance and circulation of a collection of print materials on all aspects of blindness and physical handicaps for use by the staff, professionals, and the general public.
- Technical Research and Development: Development of new equipment, maintenance of quality control of new items, and provision of various evaluative processes.
- Volunteer Training and Utilization: Recruitment and training of volunteers to produce titles added to the DBPH and network collections in limited quantities.
- Interlibrary Loan and Resources Coordination: Expansion of service to patrons through the provision of a title or item location as requested by participating network libraries.
- Network Development: Increase effectiveness and improve the quality of service from the network by providing technical review, advice, and assistance as required.
- Program Planning and Development: Anticipation of program growth and needs by investigation of automated techniques and other new technologies, provision for user and organizational feedback, and assurance of cooperation with related agencies.

1.2.1.1 continued

Appropriations for the Division for the Blind and Physically Handicapped are made annually by Congress (in Fiscal Year 1975, $11,400,000 was budgeted at the Federal level). Regional and subregional libraries receive funding from state and local sources. In Fiscal Year 1974, the combined Federal, state, and local expenditures for this library program totaled more than $17,000,000.

### 1.2.1.2 Library Network

#### A. Multi-State Centers

The multi-state center network is still in the planning and initial implementation stages. Centers have been established in Salt Lake City, Utah, and Daytona Beach, Florida, for the western and southern sections of the United States, respectively, but eventually there may be four centers.

The centers will function as materials-support units for specified geographic areas of approximately 13 states each. Under direct contract with DBPH, each center will: 1) house and lend all materials available in the national program; 2) be a focal point for volunteer production of material in its area; 3) maintain and circulate "special" collections of lesser-used materials, including back issues of magazines and books produced by volunteers in its area; 4) store and lend sound reproducers and allied equipment, and furnish replacement parts and backup repair service; and 5) house and ship nationally-produced program promotion material, such as brochures and catalogs.

#### B. Regional Libraries

The regional library is the backbone of the DBPH library network. There are currently 54 regional libraries serving the United States and its possessions. Regional libraries provide direct library service to blind and physically handicapped readers in their area, giving highly personalized assistance in selection when needed. They receive, catalog, and house many volunteer-produced books and serve as circulating libraries for material in the national collections. Many of them qualify for funding from state and local sources, and from Federal agency grants as well as through PL 89-511. Table I-A lists the regional libraries in order of the number of subregionals each services.

1.2.1.2 continued

C. Subregional Libraries

With the recent growth in the number of blind and physically handicapped persons using the free library service (an almost 400% increase in the past 6 years), the subregional library units have become a necessity. Presently, 89 subregional libraries serve 20 states. They provide the same services as the regionals, but on a smaller scale, and their service is even more highly personalized.

D. Machine Lending Agencies

The library system for the blind and physically handicapped is unique in that it circulates machines as well as books. It incorporates Machine Lending Agencies (MLA), which store, monitor, distribute, and repair talking book machines (phonographs), cassette book machines (tape players), and various accessories to assist the handicapped in the operation of their machines. There is a machine lending agency for each region in the country, and most of them are located at the regional library sites. The MLAs are staffed by volunteers (Telephone Pioneers), who repair the machines, and by people involved in distribution. LC pays for all parts used in repairs.

Each MLA is responsible for maintaining inventory control of each piece of LC-owned equipment in its area. DBPH is provided statistics concerning machine reliability, turnover rate, etc.

There is a machine lending agency for each region in the country, and most of them are located at the Regional Library sites.

| Regional Library | Area Serviced | No. of Subregionals[1] | Total Readers[2] |
|---|---|---|---|
| Chicago, IL | Illinois | 14 | 13,410 |
| Atlanta, GA | Georgia | 8 | 9,343 |
| Richmond, VA | Virginia | 8 | 6,397 |
| Talladega, AL | Alabama | 7 | 6,135 |
| Indianapolis, IN | Indiana | 7 | 7,530 |
| Lansing, MI | Michigan (except Wayne County) | 7 | 10,401 |
| Topeka, KS | Kansas | 6 | 5,257 |
| Daytona Beach, FL | Florida | 5 | 11,135 |
| Charleston, WV | West Virginia | 5 | 1,970 |
| Little Rock, AR | Arkansas | 4 | 6,171 |
| Augusta, ME | Maine | 4 | 2,185 |
| Lincoln, NB | Nebraska | 4 | 4,663 |
| Phoenix, AZ | Arizona | 2 | 4,709 |
| New York, NY | New York City and Long Island | 2 | 15,638 |
| Sacramento, CA | Northern California | 1 | 18,481 |
| Baltimore, MD | Maryland | 1 | 7,424 |
| Watertown, MA | Massachusetts | 1 | 11,326 |
| Oklahoma, OK | Oklahoma | 1 | 6,679 |
| Seattle, WA | Washington, Alaska | 1 | 5,207 |
| Milwaukee, WI | Wisconsin | 1 | 11,652 |
| Washington, DC | District of Columbia | 0 | 3,723 |
| Los Angeles, CA | Southern California | 0 | 9,888 |
| Denver, CO | Colorado | 0 | 3,840 |
| Hartford, CT | Connecticut | 0 | 11,948 |
| Dover, DE | Delaware | 0 | 11,349 |
| Honolulu, HI | Hawaii, Guam, Pacific Basin Area | 0 | 846 |
| Boise, ID | Idaho | 0 | 1,729 |
| Des Moines, IA | Iowa | 0 | 9,312 |
| Frankfort, KY | Kentucky | 0 | 2,669 |
| Baton Rouge, LA | Louisiana | 0 | 5,295 |
| Wayne, MI | Wayne County, Michigan | 0 | 3,240 |
| Faribault, MN | Minnesota | 0 | 7,351 |
| Jackson, MS | Mississippi | 0 | 3,192 |
| St. Louis, MO | Missouri | 0 | 8,060 |

TABLE I-A

REGIONAL LIBRARIES AND DISTRIBUTION OF SUBREGIONALS (JAN 19[illegible]5)

| Regional Library | Area Serviced | No. of Subregionals[1] | Total Readers[2] |
|---|---|---|---|
| Helena, MT | Montana | 0 | 2,873 |
| Carson City, NV | Nevada | 0 | 409 |
| Concord, NH | New Hampshire | 0 | 2,199 |
| Trenton, NJ | New Jersey | 0 | 12,571 |
| Santa Fe, NM | New Mexico | 0 | 2,690 |
| Albany, NY | New York (except NYC, Long Island)and Vermont | 0 | 17,030 |
| Raleigh, NC | North Carolina | 0 | 7,256 |
| Cleveland, OH | Northern Ohio | 0 | 12,564 |
| Cincinnati, OH | Southern Ohio | 0 | 4,181 |
| Salem, OR | Oregon | 0 | 4,165 |
| Philadelphia, PA | Eastern Pennsylvania | 0 | 10,847 |
| Pittsburgh, PA | Western Pennsylvania | 0 | 7,882 |
| San Juan, PR | Puerto Rico | 0 | * |
| Providence, RI | Rhode Island | 0 | 1,999 |
| Columbia, SC | South Carolina | 0 | 2,105 |
| Pierre, SD | South Dakota, North Dakota | 0 | 4,642 |
| Nashville, TN | Tennessee | 0 | 6,895 |
| Austin, TX | Texas | 0 | 20,171 |
| Salt Lake City, UT | Utah, Wyoming | 0 | 3,366 |
| St. Thomas, Virgin Islands | Virgin Islands | 0 | 196 |
| ** National Collections (DC) | Overseas and Special | 0 | 9,573 |
| 54 Regional Libraries | | 89 | 371,769 |

1 - As of January 1975
2 - As of August 30, 1974

*Serviced by National Collections until January 1, 1975
**Not Counted as Regional

TABLE I-A (cont'd)

REGIONAL LIBRARIES AND DISTRIBUTION OF SUBREGIONALS (JAN 1975)

### 1.2.1.3 Related Organizations

#### A. Library of Congress

Several departments of the Library of Congress interact with DBPH in areas relating to network assistance and the national collections. These include:

- Administrative Department:

  Information Systems Office (ISO) - provides DBPH with in-house EDP/Telecommunications expertise and support; plans and operates the Library's computer facility (Dual IBM-370/145).

  Procurement and Supply Division (P&S) - acquires products and services for DBPH, such as equipment and book contracts, and office supplies.

  Financial Management Office (FMO) - coordinates and disburses DBPH budget. Provides guidance and direction for contracting.

- Copyright Office:

  Provides guidance and assistance in copyright clearance.

- Processing Department:

  MARC Development Office (MARC DEV) - maintains the MARC data base for LC bibliographic records; reviews, approves, and assists in the establishment of MARC formats for the DBPH Bibliographic Information System.

  Catalog Distribution Service (CDS) - produces and distributes catalogs and catalog cards.

- Reference Department:

  DBPH is responsible to the Reference Department. Official reporting requirements are outlined in Section II. The Reference Department is the interface point between DBPH and other departments of the Library of Congress.

1.2.1.3 continued

B. Department of Health, Education, and Welfare

Three subsections of HEW are involved with grants to state and local organizations for the blind and physically handicapped. They are:

- Social and Rehabilitation Service:

  Provides grants for vocational rehabilitation (training, education, and scholarships for the physically handicapped).

- Office of Education:

  Provides educational assistance for the handicapped, from pre-school level upward (including special assistance for the deaf-blind and funding for Library Services for the handicapped at the state and local levels) and funding for training educational personnel serving the handicapped.

- Social Security Administration:

  Provides funds to states for services to crippled children, disabled veterans, blind persons, etc.

C. Government Printing Office (GPO)

DBPH catalog cards, pamphlets, periodicals, and catalogs, are printed by this office.

D. State Agencies

Most regional libraries are supported by State Library Agencies. In addition, machine lending agencies often report to state commissions for the blind.

E. Volunteer Groups

Besides the Telephone Pioneers at the Machine Lending Agencies, there are many other volunteer groups that help the network to provide its services to the handicapped.

1.2.1.3 continued

These services help the readers with selection, assist in book production, etc. Working either in-house (at a library) or outside (for a volunteer organization). Volunteer braillists and narrators produce braille and recorded books for limited circulation. While materials (braille paper, cassettes, and some recording facilities) are supplied by the network, volunteers supply time and money. Some of these volunteer organizations are:

- American National Red Cross Braille Services
- Houston Taping for the Blind

F. Non-Profit Organizations

There are many non-profit organizations providing support services for the handicapped. They provide recording facilities for producing and duplicating tapes and braille under contract with LC, as provided under PL 85-308 (see Section 1.2.1.1). Many of these organizations also maintain collections of materials available for use by the blind and physically handicapped. Some of these organizations are:

- American Foundation for the Blind
- American Printing House for the Blind
- Recording for the Blind, Inc.

## 1.2.2 Technical Considerations

### 1.2.2.1 Recataloging Project

In order to ensure a consistently high quality of cataloging in the DBPH Union Catalog, a temporary staff of librarians and editors was assembled prior to the initiation of the systems study, to revise and/or edit existing cataloging. This involved the recataloging of 12,000 mass produced titles and 25,000 limited production titles, with anticipated conclusion dates of April 1975, and May 1976, respectively. A contractor will be selected to convert all recataloged records into machine readable form, using the DBPH MARC format.

### 1.2.2.2 DBPH In-House Computer System

The in-house computer system at DBPH currently supports three operational files and eight general procedures, which are an integral part of the material selection and production processes. Specifically, the procedures are: Ordering/Receiving Print Review Books, Request for Copyright Clearance, Request for Price Quotation, Annotation Input/Update, Bibliographic Data Input/Update, Production Authorization, Card Production (Limited Produced Material), and Title Cancellation. For purposes of this study, a procedure is defined as a group of transactions performed cooperatively to accomplish a number of specific tasks. At DBPH, the terminal operator is prompted through relevant portions of each procedure by control pages displayed on the CRT Terminal. Each page contains instructions and different options for entering data into the system. The procedures are reflected in the procedural work flows in Appendix A.

Additional files and procedures have also been defined and are being tested prior to implementation, while the operational In-Process, Annotation, and Master Bibliographic Files are being modified to accept records in the revised DBPH MARC format. The file for quota-selection by the network will be operational in September 1975.

### 1.2.2.3 MARC Format

The basic MARC format provided the foundation for the design of a machine record format for the DBPH Union Catalog. The principle guiding the development of the DBPH record format was the accomodation of requirements unique to the types of bibliographic material at DBPH with a minimum deviation from the basic MARC format. This minimum deviation is a significant factor in terms of the feasibility of using software developed by the Library of Congress for processing MARC records.

The record format developed for DBPH is described in "Internal Specifications for Special Materials".

### 1.2.2.4 Library of Congress Computer Capabilities

The Library of Congress can provide the following supportive services to the Division for the Blind and Physically Handicapped:

1.2.2.4 continued

- The Information Systems Office operates a dual IBM-370/145 and has a 4800 baud multidrop line for on-line terminal connections. In addition, software and systems personnel are available to LC organizations.

- The MARC Development Office provides software and systems support related to the MARC records. They also guide the development of MARC formats to meet unique requirements and assist in programming. Programs to sort, search, and query MARC records are already available.

- The Catalog Distribution Service (formerly known as the Card Division) has a Videocomp capable of providing electronic photocomposition of 3 X 5 catalog cards and camera ready masters for printing at the Government Printing Office.

Detailed descriptions of these capabilities are included in Section IV.

### 1.2.2.5 The Three-Year Plan

The present study is the first major step of a three-year plan for a comprehensive, bibliographic information system for DBPH. In developing the automated system, DBPH has five basic goals:

- To increase the effectiveness of service;

- To promote effective inter-agency communication about bibliographic materials;

- To make efficient use of appropriate Library of Congress operations, equipment, and bibliographic standards;

- To reduce the per-unit cost of processing materials at DBPH, and;

- To devise a foundation for a national bibliographic system for the blind and physically handicapped.

1.2.2.5 continued

The plan calls for implementation in three phases:

PHASE I - System Analysis, Design and File Building

PHASE II - System Development and Implementation

PHASE III - System Installation, Testing and Operation

This study, as a part of Phase I, encompasses bibliographic record development as well as a systems study. Two other tasks, not within the scope of this study, complete Phase I: catalog record conversion and initiation of systems development.

# SECTION II

# DBPH ORGANIZATION AND OPERATIONS

## 2.1 OBJECTIVES AND SCOPE OF SECTION

The purpose of this section is to provide an overview of the DBPH internal organization and operations. As such, it serves as a basis for deriving system requirements. It includes a description of both the present organization and the proposed reorganization to be implemented when approved. It details the scope of responsibility of each unit and explains the DBPH functions independent of the organizational structure. Lastly, current reporting requirements are listed in terms of the organizational unit generating and receiving the reports and frequency of issue. The present organizational relationships between DBPH sections are shown in Figure II-1.

## 2.2 DBPH ORGANIZATION

The present DBPH operation is divided into two areas, acquisitions and reader services, both responsible to the Office of the Chief. The Assistant Chief for Acquisitions coordinates six operational units within the Division:

1) Selection Section – "Evaluates and selects appropriate books, periodicals, and other reading materials to be recorded, transcribed into braille, or produced in any other form for national distribution to cooperating libraries."*

2) Publications Section – "Plans the information and publications programs for the Division, determining priorities according to the current emphasis and needs of the division and its cooperating libraries."*

3) Business Administration Section – Procures "all reading resources, equipment, and other materials; fiscal operations and personnel matters; coordination of automation projects and building management operations."*

4) Technical Section – Develop and establishes "the specifications and designs for equipment and accessories supplied to the readers, and is responsible for quality control of procurements. Originates research and development programs."*

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*Functional Chart for DBPH (May, 1974).

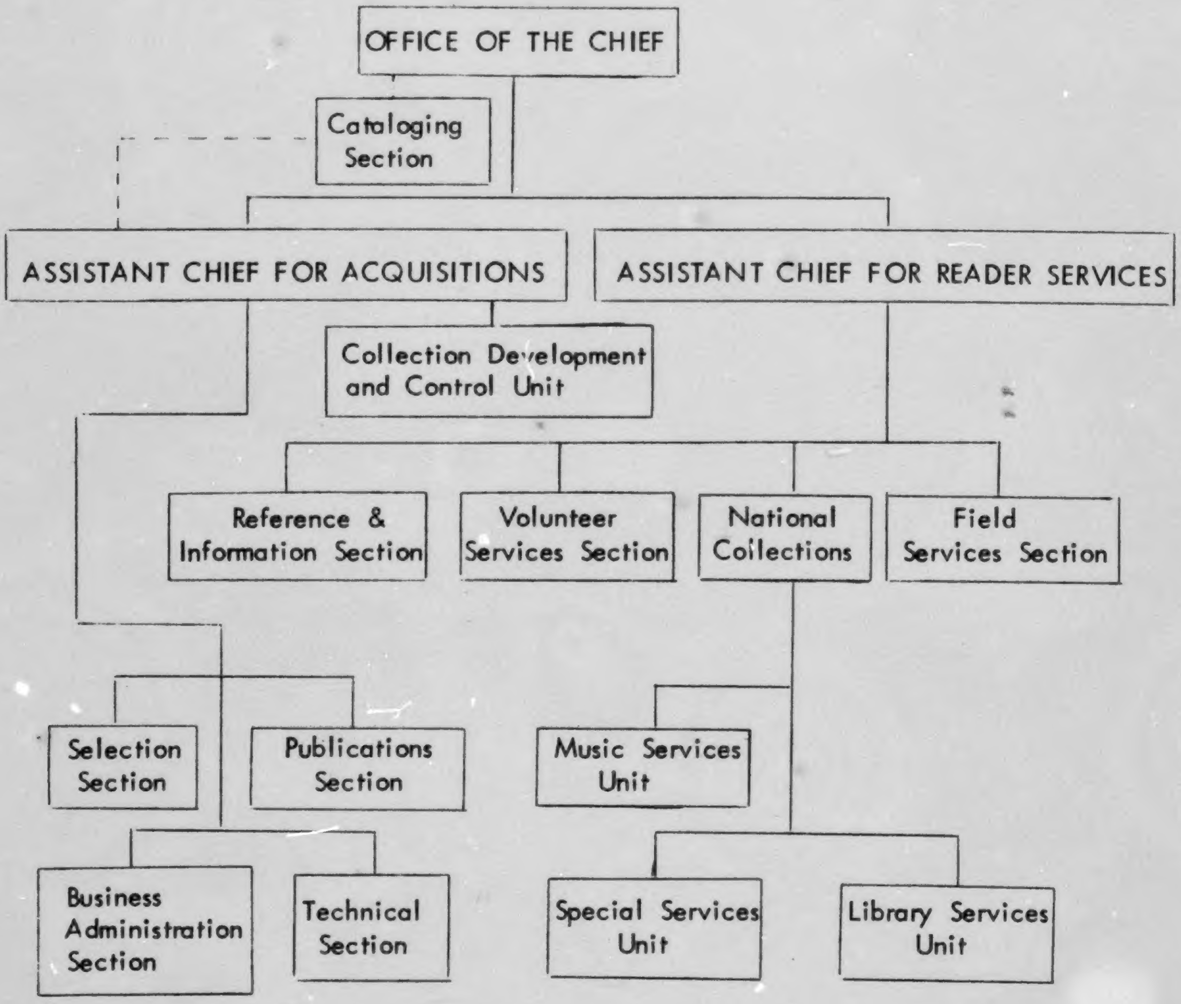
OFFICE OF THE CHIEF
Cataloging Section
ASSISTANT CHIEF FOR ACQUISITIONS
ASSISTANT CHIEF FOR READER SERVICES
Collection Development and Control Unit
Reference & Information Section
Volunteer Services Section
National Collections
Field Services Section
Selection Section
Publications Section
Music Services Unit
Business Administration Section
Technical Section
Special Services Unit
Library Services Unit

FIGURE II-1

ORGANIZATIONAL CHART OF PRESENT DBPH OPERATION – MAY 1974

2.2 continued

5) Collection Development and Control Unit – Assumes responsibility "for acquisition, processing, . . . and informing cooperating libraries of all material added to the National Collections. Maintains the union catalog."

6) Cataloging Section – Prepares "bibliographic entry of DBPH materials coordinated by both the Office of the Chief and the Assistant Chief for Acquisitions."

The Assistant Chief for Reader Services is responsible for coordinating seven organizational units within the Division:

1) National Collections – "Provides national support for all cooperating libraries by developing, maintaining, and making available the Division's resources of reading materials."*

2) Library Services Unit – Assumes responsibility "for all support services to regional, subregional, and institutional libraries, including tape duplication services."*

3) Special Services Unit – Provides "direct services to readers in Puerto Rico and abroad, and serves those individuals needing specialized materials not available through cooperating libraries."*

4) Music Services Unit – "Develops, maintains, and promotes the use of the national collections of musical scores and instructional texts and encourages the development of new techniques and materials for teaching. Provides nationwide circulation and reference services of all music materials."*

5) Field Services Section – "Prepares machine quotas for regional libraries and machine lending agencies and is responsible for the receipt, storage, disposal, and shipment of books, machines, catalogs, publications, and supplies."*

6) Reference & Information Section – "Develops the collection of printed materials on all aspects of blindness and physical handicaps. Provides reference services to the staff, cooperating libraries and the general public. Prepares statistical reports; compiles current information of interest to libraries and organizations."*

---

*Functional Chart for DBPH (May, 1974).

7) Volunteer Services Section – "Recruits, trains, and coordinates volunteers who produce and process books in braille, tape, large type, and other forms. Is the braille authority for the Library of Congress on all braille codes, for the preparation of guides and teaching manuals for all formats and sets standards and maintains quality control for recordings and books in large type produced by volunteers."*

## 2.3 PROPOSED REORGANIZATION

There is at present a reorganization plan pending for the Division for the Blind and Physically Handicapped. The proposed organization, which will group operations on a more functional basis, is shown in Figure II-2.

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*Ibid.

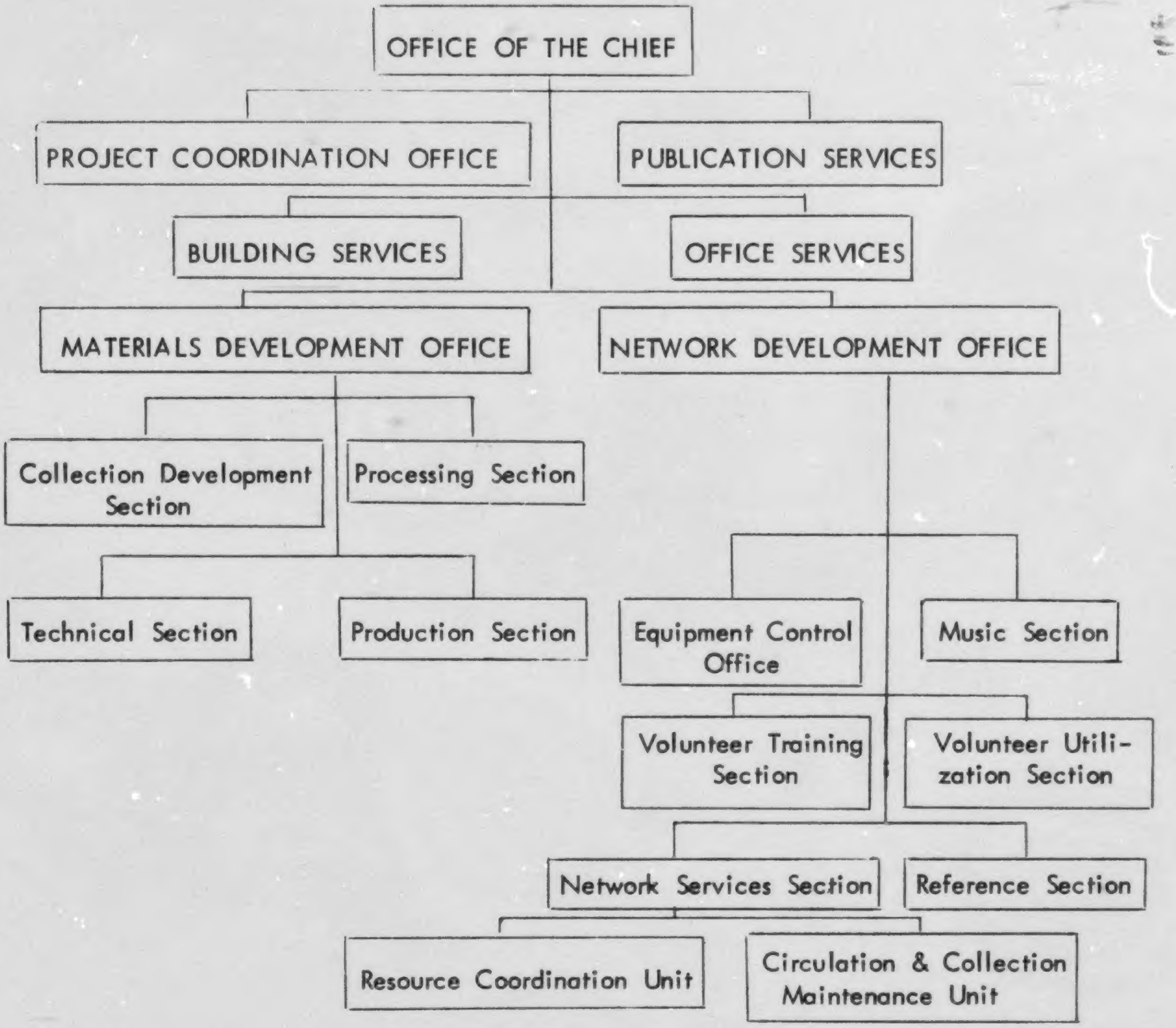

OFFICE OF THE CHIEF
PROJECT COORDINATION OFFICE
PUBLICATION SERVICES
BUILDING SERVICES
OFFICE SERVICES
MATERIALS DEVELOPMENT OFFICE
NETWORK DEVELOPMENT OFFICE
Collection Development Section
Processing Section
Technical Section
Production Section
Equipment Control Office
Music Section
Volunteer Training Section
Volunteer Utilization Section
Network Services Section
Reference Section
Resource Coordination Unit
Circulation & Collection Maintenance Unit

FIGURE II-2

ORGANIZATIONAL CHART OF PROPOSED DBPH OPERATION

## 2.4 DBPH FUNCTIONS

Because of the dynamic nature of change in a fluid organizational structure, it is difficult to isolate for analysis the specific operations of a particular unit. However, there are aspects of any operation, particularly one with as clear-cut a purpose as the Division's, which are independent of the organizational units and people involved. Organizational modifications will not alter the functions performed by the Division, because these functions do not rely on the present structure for their existence. They are intrinsic to DBPH.

There are 30 functions basic to DBPH. In some cases they cross organizational lines.

The organizational units of DBPH are relatively interdependent: for example, the Selection Section depends upon the Business Administration Section to order the material it selects for production. It also depends on the Field Services Section to receive the copies ordered. Functions, on the other hand, can be specified separately and classified in broad areas. A list of specific functions begins on Page II-7 and detailed flow charts of most can be found in Appendix A.

1) Library Functions: Functions 1 - 19 include all aspects of the operation of the library network. This category consists of normal library procedures such as acquisition, cataloging, and circulation, as well as the more specialized procedures unique to DBPH; those dealing with production of titles in special media, for example, or those which help coordinate the network of regional libraries serving the blind and physically handicapped. Library functions can be further subdivided into three sub-areas: "Precataloging", Functions 1 - 6, "Cataloging", Functions 7 - 8, and "Post-Cataloging", Functions 9-19.

2) Equipment Control Functions: Functions 20 - 23 cover those procedures that control DBPH field equipment, cassette and recorded disc machines, as well as the actions leading to new advances in technology. It also monitors the production of new machines according to DBPH specifications.

3) Administrative Functions: Functions 25 - 29 include those functions necessary to the continued existence and growth of the Division, as well as those related to interaction with LC administration.

4) Training Function: Function 30 is the training of volunteers.

## LIST OF DBPH FUNCTIONS

| | | |
|---|---|---|
| 1. | Quota Determination: | Internal determination of quotas by media and by subject category. Includes library determination of copies desired. |
| 2. | Selection: | Procedures invluding initial selection of a book, determination of adaptability to special media, and approval for production. |
| 3. | Material Procurement: | Initial ordering of print copies and associated recordkeeping through the log-in of the print book. |
| 4. | Copyright Clearance: | All actions concerned with obtaining copyright clearances for a book, and related paperwork. |
| 5. | Master Production: | Production of the initial copy in disc, open reel or braille form, by either volunteers or a contractor, or generation of a limited issue in a selected medium. |
| 6. | Mass Production: | Duplication of the master copy into patron usable form. |
| 7. | Cataloging: | Preparation of card entries, from the initial annotation to the final approval of the manuscript and the book cards. |

## LIST OF DBPH FUNCTIONS (cont'd)

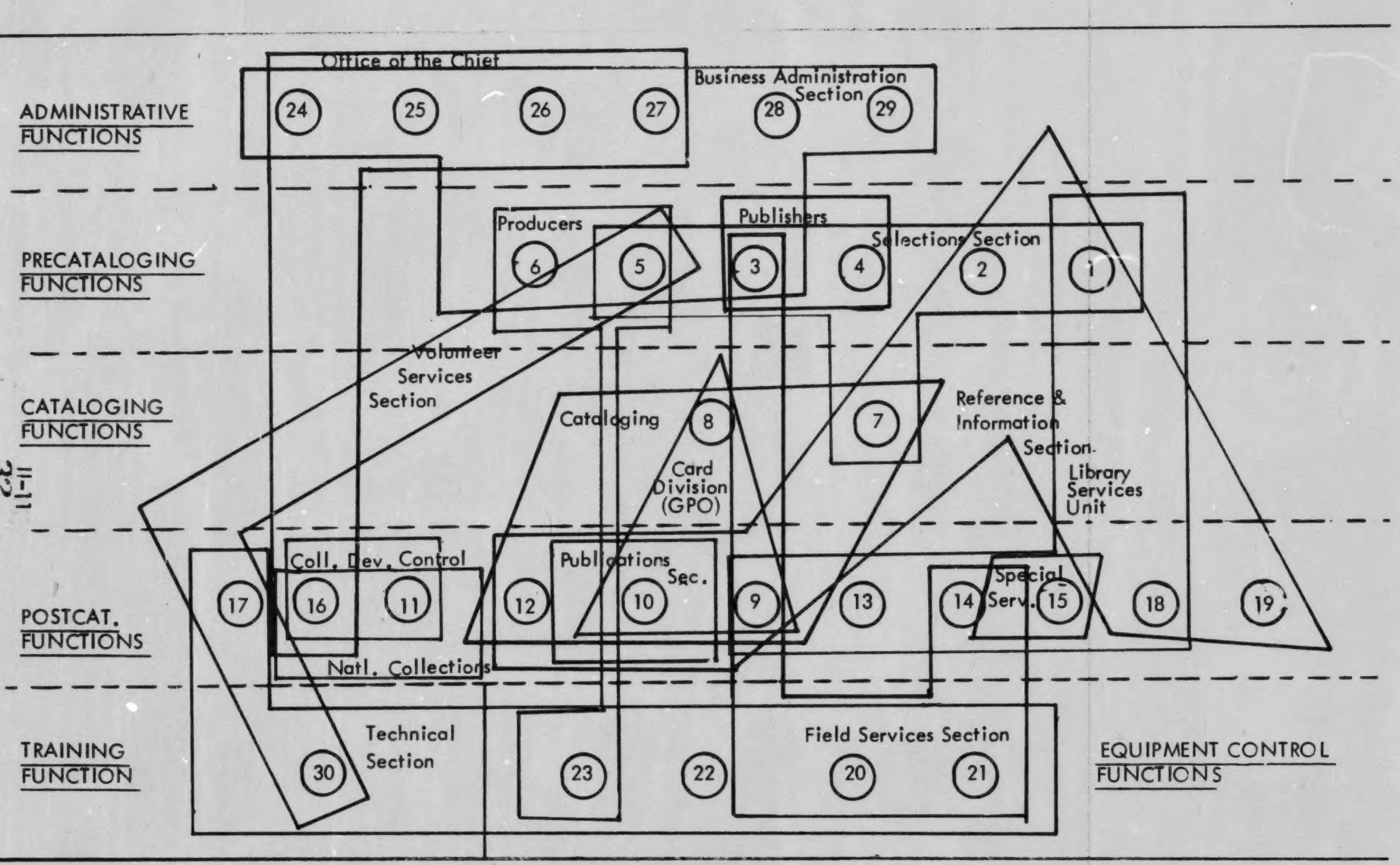
| | | |
|---|---|---|
| 8. | Card Generation: | Procedures relating to the production of catalog cards following the approval of the manuscript card. |
| 9. | Distribution: | Distribution of DBPH materials and equipment to network libraries and patrons. |
| 10. | Publication Activities | Preparation of DBPH publications (catalogs, pamphlets, periodicals, directories, and bibliographies). |
| 11. | Collection Maintenance. | Monitoring of the shelves. |
| 12. | Preparation of Bibliographies: | Generation of booklists for use by DBPH, network libraries, and patrons. |
| 13. | Circulation: | Loan of DBPH materials directly to patrons. |
| 14. | Inter-Library Loan: | Performance of searches for temporary and permanent loans, including the redistribution of excess material and the associated paperwork. |
| 15. | Special Services: | Response to special requests from patrons. |
| 16. | Network Coordination: | Providing policy recommendations concerned with the growth of the network in terms of size, services provided, and internal development. |
| 17. | Volunteer Mobilization: | Coordinating tasks of volunteer groups, auditioning narrators, assigning titles to specific braillists and narrators. |
| 18. | Reference: | Maintenance of DBPH archives and reference collection and response to inquires about the same. |

## LIST OF DBPH FUNCTIONS (cont'd)

| | | |
|---|---|---|
| 19. | Public Information Preparation: | Planning promotional material. |
| 20. | Equipment Maintenance: | Distribution of parts to Telephone Pioneers, new machines to Lending Agencies, etc.; machine repair. |
| 21. | Equipment Inventory: | Keeping records on the whereabouts of DBPH equipment. |
| 22. | Research and Development: | Generation of technical specifications for DBPH equipment and material contracts. General research into related fields. Monitoring of outside production. |
| 23. | Equipment Production: | Production of DBPH equipment by outside contractors, as specified by contract. |
| 24. | Division Planning: | Determination of short and long range plans, programs, and policies for DBPH. |
| 25. | Fiscal Management: | Preparation of the budget for its submission to LC and presentation to Congress, emendation of the budget and allocation of funds, preparation of monetary reports. |
| 26. | Personnel Services: | Interface between LC personnel office and DBPH personnel. |
| 27. | Contracting: | Determination of needs, preparation of RFPs from specifications provided by the Technical Section, management of on-going contracts, awarding of contracts. |
| 28. | Physical Facilities Maintenance: | Custodial work, general maintenance and general office work. |
| 29. | Physical Inventory: | Inventories of the Division Facilities. Coordination with ordering of supplies. |
| 30. | Training: | Instruction for volunteers in fields of:<br>1) Braille Transcribing, 2) Braille Proofreading, 3) Braille Music Transcribing, 4) Braille Music Proofreading, 5) Recorded Book Narration, 6) Equipment Maintenance |

2.4 continued

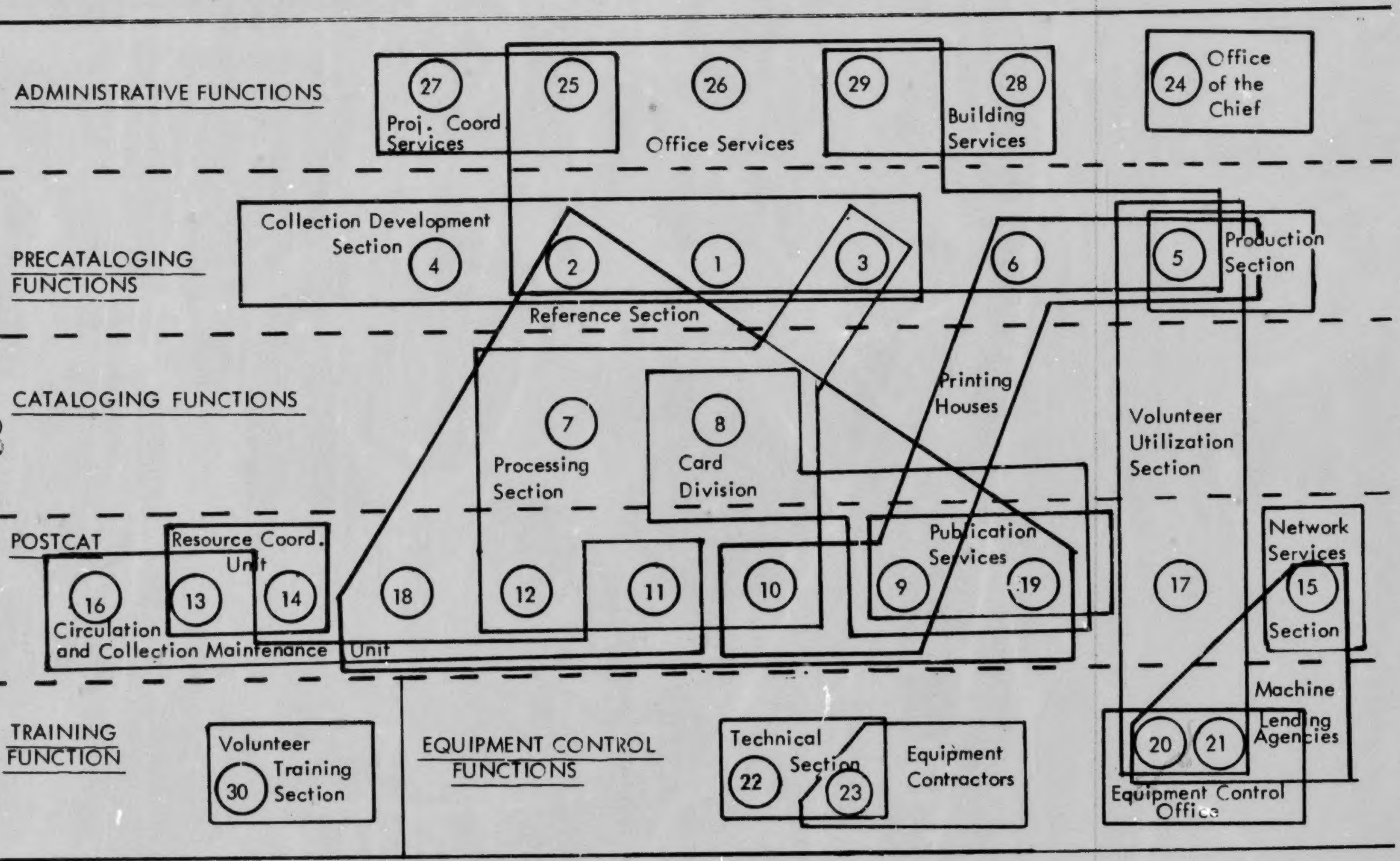
Figures II-3 and II-4 are functional/organizational charts showing the interactions between the organizational units in terms of the functions identified above. This allows determination of overlap points among the functions, and shows which organizational units will be affected by changes in procedure for a specific function. Functional/organizational charts are shown for both the present organization and the proposed reorganization. As both the Music Section and the Regional Libraries are more multi-functional than most other units, these have been indicated separately because of space limitations. The circled numbers in the charts refer to the functional numbers assigned in the list of DBPH Functions.



MUSIC SECTION: 2,3,4,7,8,10,11,13.

FIELD LIBRARIES: 1,2,5,6,8,14,15,17,22

FIGURE II-3. DBPH FUNCTIONAL/ORGANIZATIONAL CHART--PRESENT OPERATION



MUSIC SECTION: 2,3,7,8,10,11,13.    FIELD LIBRARIES: 1,2,5,6,8,14,15,17,22.

DBPH FUNCTIONAL/ORGANIZATIONAL CHART
PROPOSED REORGANIZATION

FIGURE II-4

## 2.5 DBPH REPORTING REQUIREMENTS

As a part of the Library of Congress, the Division for the Blind and Physically Handicapped must respect certain official reporting requirements. The Division's reports are used for the annual report of the Librarian of Congress and for overall administrative planning. In-house reporting requirements must also be met to facilitate the control and planning of DBPH operations. These are essentially informational reports, which are used by DBPH administration and the network libraries.

Both official and in-house requirements are summarized in Table II-A. The reports are prepared manually, which involves much clerical and statistical work.

Besides required reports, other statistics on the operation of DBPH are generated for internal use. They concern quota determination, interlibrary loan use, and acquisition policy. DBPH operations must be structured for easy accessibility of information needed for these reports.

| Report Name | Generated By | Submitted To | Date Due | Frequency |
|---|---|---|---|---|
| 1. Acquisitions (volunteer & gift) | National Collections, Volunteer Services Section | LC Exchange and Gift Division | 10th of month | Monthly |
| 2. Acquisitions (national program) | Business Administration Section, National Collections, Volunteer Services Section | LC Processing Department | Jan. 15,<br>July 15 | Semiannually |
| 3. Comparative Report of Activities | Same | LC Reference Department | Oct. 15,<br>Jan. 15,<br>Apr. 15,<br>July 15 | Quarterly |
| 4. National Program | Same and Regional Libraries | Same | Aug. 15 | Annually |
| 5. "White Sheets":<br>a) Annual Expenditures | Reference and Information Section; Business Administration Section | Same | Feb. 1 | Annually |

TABLE II-A

DBPH REPORTING REQUIREMENTS

| Report Name | Generated By | Submitted To | Date Due | Frequency |
|---|---|---|---|---|
| 5. "White Sheets": (cont'd) | | | | |
| b) Total Readers (5-year summary) | | | | |
| c) Total circulation (5-year summary) | | | | |
| d) Books Purchased (5-year summary) | | | | |
| e) Sound reproducers and spare parts purchased (8-year summary) | | | | |
| f) Accessories for sound reproducers (8-year summary) | | | | |
| g) Volunteer Program (5-year summary) | | | | |
| h) Circulation by Regional Libraries (2-year comparison) | | | | |

TABLE II-A (cont'd)

DBPH REPORTING REQUIREMENTS

| Report Name | Generated By | Submitted To | Date Due | Frequency |
|---|---|---|---|---|
| 5. "White Sheets": (cont'd)<br>i) Readers by Regional Libraries (2-year comparison) | | | | |
| 6. Circulation | Regional Libraries, Library Services | Chief | Feb. 1,<br>Aug. 1 | Semiannually |
| 7. Readers | Same | Same | Same | Semiannually |
| 8. Circulation and Readers | Same | Chief, Regional Libraries | Aug. 15 | Annually |
| 9. Estimated Cost of Books | Business Administration Section | Internal Use | Oct. 1 | Annually |
| 10. Copyrights Cleared | Selections Section | Internal Use | | Quarterly |
| 11. Interlibrary Loan Statistics | Library Services | Internal Use | | Monthly |

TABLE II-A (cont'd)

DBPH REPORTING REQUIREMENTS

# SECTION III

# REGIONAL LIBRARY NETWORK ORGANIZATION AND OPERATIONS

## 3.1 OBJECTIVES AND SCOPE OF SECTION

This section describes the regional library network operation. Data is based on field visits to 12 regional libraries, a representative sample, reflecting various characteristics such as size and extent of automation activities at the whole network. At each site, information on the library's acquisitions, processing, circulation, cataloging, and library automation activities was collected.

## 3.2 NETWORK ORGANIZATION

The library network serving the blind and physically handicapped consists of three types of organizations providing service on three levels. These are described in the following sections. Though some aspects of the network are still in the developmental stages, each type of organization plays an important role in providing special library services for the handicapped.

### 3.2.1 Regional Libraries/Machine Lending Agencies

The network has grown continuously since its initiation in 1931. There were orginally 19 regional libraries; today there are 54. The function of the regional library is to provide direct services to patrons and to serve as circulating libraries for the national collections of materials in special media. Most of these libraries are part of another library (state or public) though some are part of organizations working with the blind and physically handicapped (state commissions for the blind or non-profit agencies). These libraries are autonomous operations and does not dictate their internal operations

Presently, all but four states have their own regional libraries. Alaska, South Dakota, Vermont, and Wyoming are served by libraries in Seattle, Washington; Pierre, South Dakota; Albany, New York; and Salt Lake City, Utah, respectively. A complete listing of regional libraries may be found in Section I.

In 1966 the Library Services and Construction Act amendments were passed providing federal grant funds to State Library agencies for the purpose of improving library service to the blind and physically handicapped. Since then the number of regional libraries has increased 58%. During the same period the number of patrons increased over 180%. This growth rate has resulted in the establishment of subregional libraries (see Section 3.2.2) serving patrons on a more personalized basis.

While the regional libraries provide books to patrons, the machine lending agencies provide equipment support in the form of cassette players, phonographs and special accessories designed for use by the handicapped. There is currently at least one machine lending agency providing services for each regional library. This service includes machine repair as well as distribution. Telephone Pioneers provide voluntary assistance in machine repair using parts available from DBPH. The lending agency must maintain inventory control over all machines entrusted to its care. Approximately one-half of all machine lending agencies are located in the same building as the regional library, thereby allowing close interaction with the operations of the library and easy fulfillment of reporting requirements.

The present operation and needs of the regional libraries are discussed later in Section III.

### 3.2.2 Subregional Libraries

With the change in eligibility for service legislated in 1966, the need was recognized for new facilities making services available on a more personal basis. Subregional libraries have been developed to meet this need. These libraries, usually community public libraries, are connected to a regional library and act as circulating libraries for the material in the regional collection.

### 3.2.3 Multi-State Centers

Just as there is a need to reduce regional library service at a site closer to patrons, DBPH Services must become more accessible to regional libraries. This need has resulted in the establishment of multi-state centers to provide storage and distribution support for nationally produced materials, and facilities for equipment repair and tape duplication. There are presently two such centers, located in Daytona Beach, Florida and Salt Lake City, Utah, which service, respectively, the southern and western regions. Two additional centers are planned to service the southeast and Midlands regions. DBPH also plans a telecommunications network linking the multi-state centers with DBPH's computer facility, thereby making all central files available to the various field operations.

Each multi-state center will also serve as a coordinating unit for volunteer productions in its area. Supplies, assistance, and a working area will be made available to the various groups producing books. The proximity at the production sites to the central bibliographic data base will facilitate cataloging of locally produced material.

Although the functions of the multi-state centers have been specified by contract, other network functions could be assumed in the future.

## 3.3 FIELD VISITS

The data gathered in the field visits to regional libraries (see Appendix B, Structured Interview Sheet) pointed out several important variations between libraries. For example:

- ORGANIZATION - Regional libraries are responsible to various types of organizations. Some are parts of larger state, county, municipal or community libraries, and as such have various library facilities available, while others are connected to service organizations such as nonprofit or volunteer group or state commission serving the blind and physically handicapped. Though management reports would essentially contain the same information for all libraries, the frequency and format of these reports varies from library to library. The differences in parent organizations also affect the amount of available funds for any effort needed to implement the DBPH system.

- STAFF - The libraries visited vary in professional capabilities. Most have at least one professional librarian and Iowa has six. Total staffs average approximately 12, but range as high as 36. Approximately 80% of the staff are required to handle the clerical tasks connected with a manual operation. Much of this time is spent performing circulation tasks.

- EDP EQUIPMENT - (see Section 3.6). The libraries visited range in EDP sophistication from no equipment to an automated system performing complete circulation and inventory control functions (Los Angeles). Some libraries have access to computer facilities but lack technical personnel and funds. The EDP equipment used encompasses a broad range of manufacturers and capabilities.

- OTHER EQUIPMENT - Typical is a duplication facility allowing conversions of books from disc to cassette. A survey of all regional libraries would provide more precise information concerning availability of microfilm/fiche readers, photoduplication facilities, etc. Some libraries have TWX or Toll-free call capability, which allows direct interaction with DBPH.

- AUTOMATION PLANS - (see Section 3.6). Among libraries, specific plans for automation vary from none at present to virtually total automation. Many libraries are caught in the middle. They would like to automate but need assistance, guidance, and funds in order to do so. They also need network standards on which to base their systems. Most libraries would adhere to such standards, and would appreciate some interlibrary communications concerning automation activities.

## 3.4 REGIONAL LIBRARY FUNCTIONS

A variety of basic functions are performed by the network libraries. These include:

- Patron Registration
- Patron Assistance
- Interlibrary Loan
- Cataloging
- Circulation
- Equipment Repair
- Distribution
- Management Reporting

A significant problem in the network is the wide procedural variation in the performance of these functions, resulting from library differences in staff, funding, equipment, and basic policy. This variation must be resolved to a significant degree before any system assisting network operations can be successfully implemented.

The following sections discuss several functions, and are supplemented graphically by generalized flow charts (Appendix C) describing the performance of each function. A particular library may deviate from the discussion or the flow of activity described.

### 3.4.1 Patron Registration (Appendix C, Figure C-1)

Discovering and enrolling new patrons is a prime function of the network since it is estimated that currently only 6% of the potentially eligible readership is being served.

When a potential patron requests service, a variety of materials are sent. Included are pamphlets explaining the various services available, and an application form. Although a standardized application is available from DBPH, many libraries prefer to develop their own form. Through these forms a basic level of patron information is collected, with some libraries requesting a detailed profile of the patron while others ask only for the bare essentials. In some cases, the application form itself may be designed to act as the patron file. In most cases the form is placed in a manila folder which will eventually contain has/had lists, want lists, number lists, address plates and labels, as well as any communication from the patron.

Once the patron has indicated his medium and subject preferences, a machine and books are mailed to him or in some cases delivered personally, as indicated in Appendix C. Subscriptions for the various magazines requested are initiated and catalogs are sent to the patron.

### 3.4.2 Patron Assistance (Appendix C, Figure C-2)

One of the most important functions of the library is to be responsive to patron requests and provide immediate assistance.

The responsiveness that can be provided is predicated on internal procedures, which should provide rapid access to patron files, records and materials. Generally, the library readership is divided among various Reader Advisors.

As shown in Appendix C, a request for assistance may take many forms, from a complaint to an urgent need for special educational material. Questions and problems arrive by telephone, written correspondences, and on occasion walk-in contact. The procedure used must provide for documentation of both the request and the assistance provided. The Patron file is the depository for the documented communication. This provides useful background for any subsequent requests for assistance.

### 3.4.3 Acquisitions

There are two general categories of addition to a Regional Library's collection, solicited and unsolicited material.

#### 3.4.3.1 Solicited Acquisitions (Appendix C, Figure C-3)

Regional libraries may request specific material from DBPH excess lists, commercial distributors, volunteer productions, and through permanent interlibrary loan (See Section 3.4.4). The amount of material thus acquired depends to a certain extent on the budget of the library (for acquisition of non-DBPH material), need, and storage space available.

### 3.4.3.2 Unsolicited Acquisitions (Appendix C, Figure C-4)

Generally over 90% and in most cases 99% of all acquisitions come from national productions through DBPH. Other materials are acquired through donations by various groups. This non-DBPH material must be checked for quality and content, and then cataloged accordingly. There is currently little or no cataloging done for this material, because of a lack of standards and/or staff.

### 3.4.4 Interlibrary Loan (Appendix C, Figure C-5)

The Regional Libraries are often asked to provide material not in their collection. When this happens, an interlibrary loan form is sent to DBPH or to another regional library. The address card on the form is changed in the case of a loan from a regional library to insure return of the material to the proper library. In most cases these requests are addressed to DBPH, resulting in very poor use of the capabilities of a library network for interlibrary loan.

### 3.4.5 Cataloging (Appendix C, Figure C-6)

With few exceptions, Regional Libraries do not have a cataloger. This expertise is generally supplied by the resident librarian. The general need is to assign additional subject headings to the catalog cards for improved subject identification. Additional content notes, analytics and revised annotations are supplied as deemed useful.

In the case of the volunteer produced materials considered for local use, the cataloger prepares the original catalog card.

A major problem is the backlog of books that are received and awaiting cards from the Library of Congress. In order to place the book in circulation, a temporary card may be prepared by the local library for internal use pending arrival of the catalog cards from the Library of Congress.

### 3.4.6 Circulation

Two circulation methods account for virtually all circulation systems currently in use in the network. The Regional Libraries employ either one of these methods or some combination of both.

### 3.4.6.1 Turnabout (Appendix C, Figure C-7)

This method provides the patron with a constant number of books; if three books are returned, three new ones are sent. The book numbers are entered in a patron's file to insure that there is no duplication. Books are selected on the basis of a want list (number list) or from a patron's indicated areas of interest. Currently, there is no easy way of locating a particular book.

### 3.4.6.2 Calendar (Appendix C, Figure C-8)

By this method, books are sent out at regular intervals, and the policy has some obvious drawbacks. Book control is inadequate (as in turnabout) since new books are sent even before old ones are returned.

in the event of a special request, (Appendix C, Figure C-9), the book is sent immediately if available. If unavailable, a request for the book will be placed on a reserve list, and the book will be sent out when a copy arrives.

### 3.4.7 Equipment Repair (Appendix C, Figure C-10)

Equipment repair is provided by the Machine Lending Agency working with the library. Working machines are sent to the patron immediately upon receipt of a request, and in most cases before receiving the damaged machine. Better equipment control is necessary for proper allocation of machines. Periodically, spare parts are replenished through the Library of Congress.

### 3.4.8 Distribution

The means of distributing material to patrons vary widely, as do methods of circulation control. The regions need realistic standards in keeping with limits of staff and budget. Equipment distribution methods have resulted in loss of machines because of inadequate control of distribution. A record of each machine sent to a patron should be recorded in both the patron file and a machine file.

### 3.4.9 Management Reporting

The various reporting requirements of the network libraries are discussed in Section 3.5.

## 3.5 NETWORK REPORTING REQUIREMENTS

The various types of organizations providing support to the Regional Libraries necessitate a multitude of statistical reports, each with a differing format and frequency. The actual information contained in these reports, however, varies little from library to library.

There are two types of reports, those to DBPH and those to individual managements.

DBPH reports consist of gross readership and circulation statistics, growth percentages on a semiannual basis, and monthly machine statistics (See Section 2). Periodical surveys concerning library characteristics (staff, budget, professional capabilities, etc.), are also returned. The regional library is responsible for gathering this data from its various subregionals and deposit collections.

Management reports consist of the above information plus expenditure and acquisition statistics. Again, though the frequency and format of these reports may differ among libraries, the actual data is the same.

## 3.6 REGIONAL LIBRARY AUTOMATION ACTIVITIES

Regional libraries are confronted with a rapid rise in workload. In order to meet this increasing demand without diminishing service, the libraries are investigating various automated systems:

The two critical areas of need are:

- Circulation
- Inventory Control

They go hand-in-hand and are labor intensive. The volume of material handling and record keeping has reached a critical stage. Table III-A summarizes the major automation activities currently in existence in the regional libraries. These encompass a wide variety of both current and planned activities, which can be categorized as follows:

- Fully automated libraries
- Libraries anticipating automation
- Libraries with no plans to automate
- Libraries that would like to automate but lack funds and staff

| REGIONAL LIBRARY | STATUS | AUTOMATED APPLICATION | PLANNED APPLICATION | EXISTING COMPUTER EQUIP. | EDP MANPOWER AVAILABLE | PROBLEM |
|---|---|---|---|---|---|---|
| Daytona Beach, Florida | RFP for Automated library system is ready for immediate release. | None | . Circulation<br>. Has had list<br>. Mailing list<br>. Inventory Control | None | None | N/A |
| Austin, Texas | Plans to acquire larger system, (perhaps a S/360 Model 40) | . Circulation<br>. Patron List<br>. Inventory<br>. Reader Assistance | . Further enhancement | S/360 Model 30<br>IBM S/360 Model 30 | Both IBM and in-house staff. | . Shared computer Difficult to schedule computor time, Want dedicated system |
| Cleveland, Ohio | Contract with Hewlett Packard to develop an automated library system. | . Mailing Label<br>. Simple Circulation Control | . Circulation<br>. Inventory Control<br>. Mailing labels<br>. Reader Assistance | Digital Equip. Company<br>PDP11 | None | Shared computer Difficult to schedule computor time |
| Des Moines, Iowa | No plan at this time | None | Will investigate when it becomes necessary | None | None | N/A |

TABLE III-A

SUMMARY OF AUTOMATED ACTIVITIES AMONG THE REGIONAL LIBRARIES

| REGIONAL LIBRARY | | STATUS | AUTOMATED APPLICATIONS | FUTURE APPLICATIONS | COMPUTER EQUIPMENT | EDP MANPOWER AVAILABLE | PROBLEM |
|---|---|---|---|---|---|---|---|
| Mass. | Boston | . Burroughs Equipment installed for business application | Reader List<br>. Performed by Service Bureau | . Mailing List<br>. Reader List (in-~~house~~) | . Burroughs L5000 L8000<br>. 1-Std TWX<br>. 1-Braille TWX<br>. Dial up to Babson Institute | None | N/A |
| | Worcester (Sub-reg.) | . Equipment installed<br>. Equipment available for use | None | . Mailing List<br>. Circulation | N/A | N/A | N/A |
| Northern New York | | System Design 90% complete | None | | | Staff of NY State Library | N/A |

TABLE III-A (cont'd)

SUMMARY OF MAJOR AUTOMATION ACTIVITIES

| REGIONAL LIBRARY | | STATUS | AUTOMATED APPLICATIONS | FUTURE APPLICATIONS | COMPUTER EQUIPMENT | EDP MANPOWER AVAILABLE | PROBLEM |
|---|---|---|---|---|---|---|---|
| N.Y. City | Nassau Sub-reg. | N/A | None | None | Univac 1004/5<br>2 VI-C Tapes<br>U9400<br>4 VI-C Tapes<br>KP, Sorter, Reprod. | None | N/A |
| | Suffolk Sub-reg. | Would like to use available muchine | None | None | TWX | County Stuff available | N/A |
| Eastern Pennsylvania | | Submitted budget for approval | None | None | N/A | N/A | N/A |
| Maryland | | No current automation plans | None | None | N/A | N/A | N/A |
| Los Angeles, CA | | Automated | Circulation<br>Statistics<br>Talking Book<br>Cassette<br>Braille Book | Accounting | IBM S/3<br>16K-Core<br>1-5M Byte-Disc<br>96 col. reader/ punch | 1 Analyst | Inadequate Computer Storage |

TABLE III-A (cont'd)

SUMMARY OF MAJOR AUTOMATION ACTIVITIES

# SECTION IV

# SYSTEM DESIGN

## 4.1 OBJECTIVES AND SCOPE OF SECTION

This section establishes the system design and requirements for the DBPH Bibliographic Information System. The system is described in terms of its man/machine interaction. In addition, output requirements are identified and described, including the function, frequency, contents, etc., of each output. The Union Catalog requirements are outlined and justified.

All decisions influencing the design are based on the best available knowledge including a field survey of 12 regional libraries, telephone communications with selected network librarians and a survey of the pertinent literature.

This chapter consists of a suggested system design, subject to change if it becomes apparent that the design is not workable. Results/products, user feedback, the evolution of requirements, and/or changes in function should dictate the final working design.

## 4.2 SYSTEM DESCRIPTION

Conceptually, the DBPH Bibliographical Information System will contain three subsystems:

- In-process subsystem
- Union catalog subsystem
- Management information subsystem

The in-process subsystem should track the status of every title entered into the system, from the point of selection for print copy order to the creation of the final authoritative bibliographic record and distribution of the books produced. The record of each title is updated with additional information as the title goes through the various stages of processing: order and receipt of print copy, review and selection, copyright clearance, cataloging, limited and mass production, and distribution. Once established in the file, a title should be retained, regardless of whether it successfully completes

4.2 continued

all stages of processing. This would enable the person searching the file for purposes of selection, for example, to determine that the title has previously been considered but was not cleared for copyright.

The in-process file should be a union file in the sense that it will include copyright requests from the network as well as the bibliographic records of titles not produced by DBPH.

Each record in the in-process file should contain three types of information: status, e.g., the stage of processing; management, e.g., date print copy is ordered, number of copies, etc.; and bibliographic data, e.g., author, title, etc.

Titles entered into the in-process file should be retained for 5 years. The 5-year period was selected for several reasons. First, the average life expectancy of the hardest to replace and most heavily used item, the disc, is 5 years. Second, circulation of a particular title is minimal after 5 years. And finally, information concerning incomplete titles is no longer extensively required after 5 years.

Every month, those titles that have been successfully put through production should be transferred out of the in-process file. The management information associated with these titles should be transferred to the Management Information Subsystem, which supports various management reports, while the bibliographic data should reside in the Union Catalog Subsystem, which supports the book and microfiche catalog and other publications requiring the bibliographic record. The titles remaining in the in-process file should consist of those that are still in process as well as those that have "dropped out" of the process. Titles that are still in process or "live titles" should contain all of the information related to them, i.e., status, management and bibliographic. After five years, the titles that have "dropped out" or "dead titles" should be permanently transferred to a history tape, which should be available only for batch production of management reports. Therefore, at any time, the in-process file should contain completed titles that have not appeared in the Union Catalog, "live titles" that are in process, and "dead titles" that are not yet 5 years old.

As copies of titles are lost or destroyed, the bibliographic information and management data pertaining to them should be deleted or modified. If the management data and/or bibliographic data still reside in the in-process file, the status code on the title should be changed to indicate that the item no longer exists and the date of the change should be entered. The title should then be regarded as a "dead item", and when it is 5 years old, the management and bibliographic data should be transferred to the Management Information Subsystem. Until that time, the bibliographic data can be accessed on-line and the pertinent information can be reviewed and reentered if a new copy of the item is selected for production.

Once the item has become part of the Union Catalog and the management data has been transferred to the Management Information Subsystem, changes and deletions should be accomplished by matching the DBPH control numbers assigned to each item entered into the system.

If a rejected title is reconsidered, the appropriate changes to the status code and action date of the existing entry should be made either through on-line access (if the title is less than 5 years old) or through the monthly correction tape (if it is older than 5 years). Should the item be accepted for production at this time, the old entry should be purged from the history tape through the following monthly correction run, and the title entered as a new item in the In-Process File.

The In-process File should be available for on-line searching and update at DBPH. In order to provide the same scope of information to the network, two monthly products should be produced. The first "the Union Catalog Monthly Update", should be a main entry listing giving complete bibliographic information for all titles completed since the previous Union Catalog was produced. Indices to these titles should be available by subject heading, DBPH book number, narrator, and Dewey number. As a minimum, author and truncated titles should be given for each index item. The second product, LUMP, should be a brief listing of titles that are in-process or that have been rejected. In author/title sequence, it should list the following for each item: author, title, publisher, publication date, status code(s), and status date for each code. The cumulated Union Catalog Monthly Update should be updated and produced prior to production of LUMP which covers in-process and rejected titles.

Figure IV-1 is a block diagram which shows an overview of the DBPH Bibliographic Information System and the relationships among its major components. Figure IV-2 provides a more detailed picture of the cataloging component of the In-Process Subsystem.

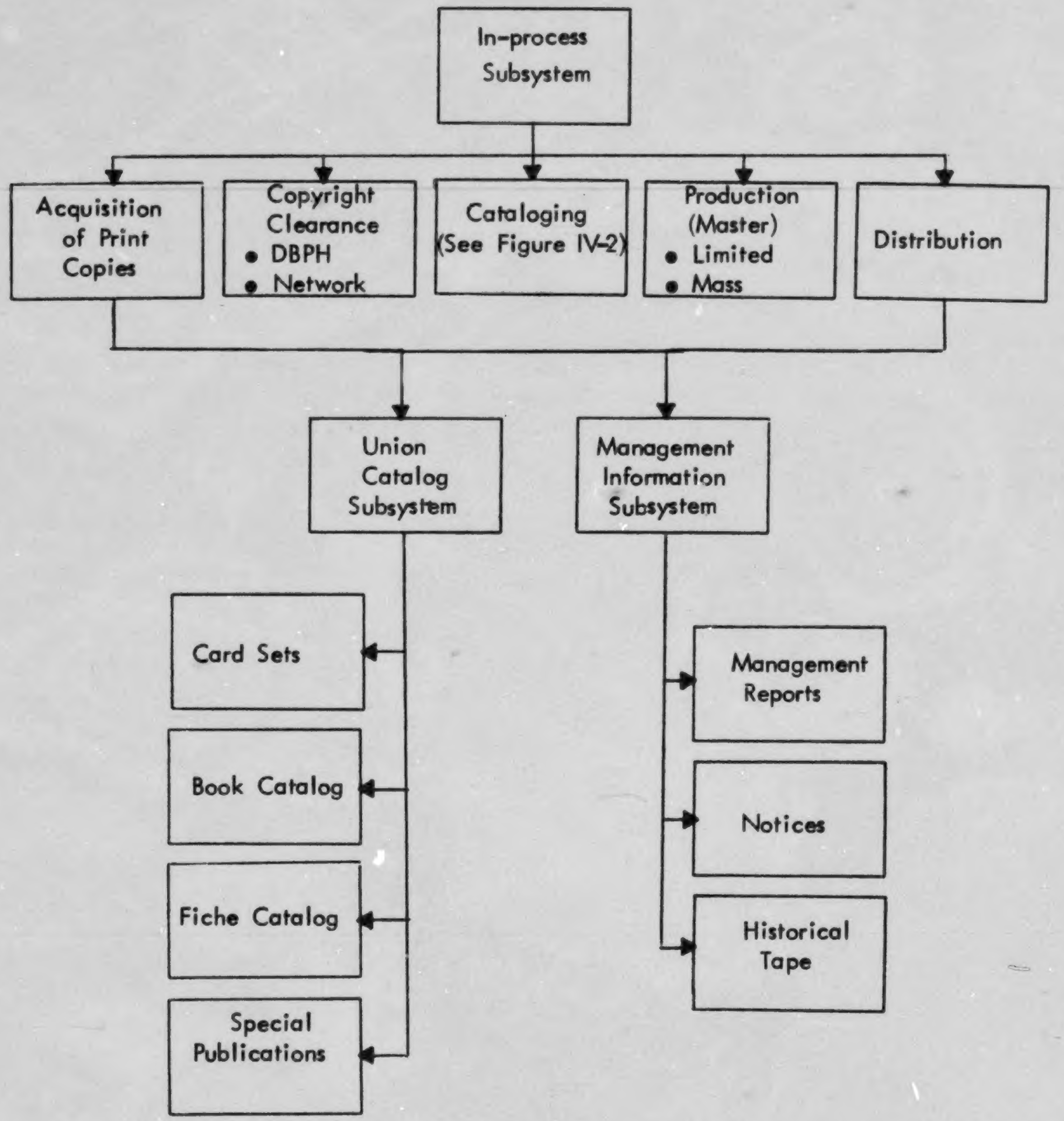


FIGURE IV-1

OVERVIEW OF DBPH BIBLIOGRAPHIC INFORMATION SUBSYSTEM

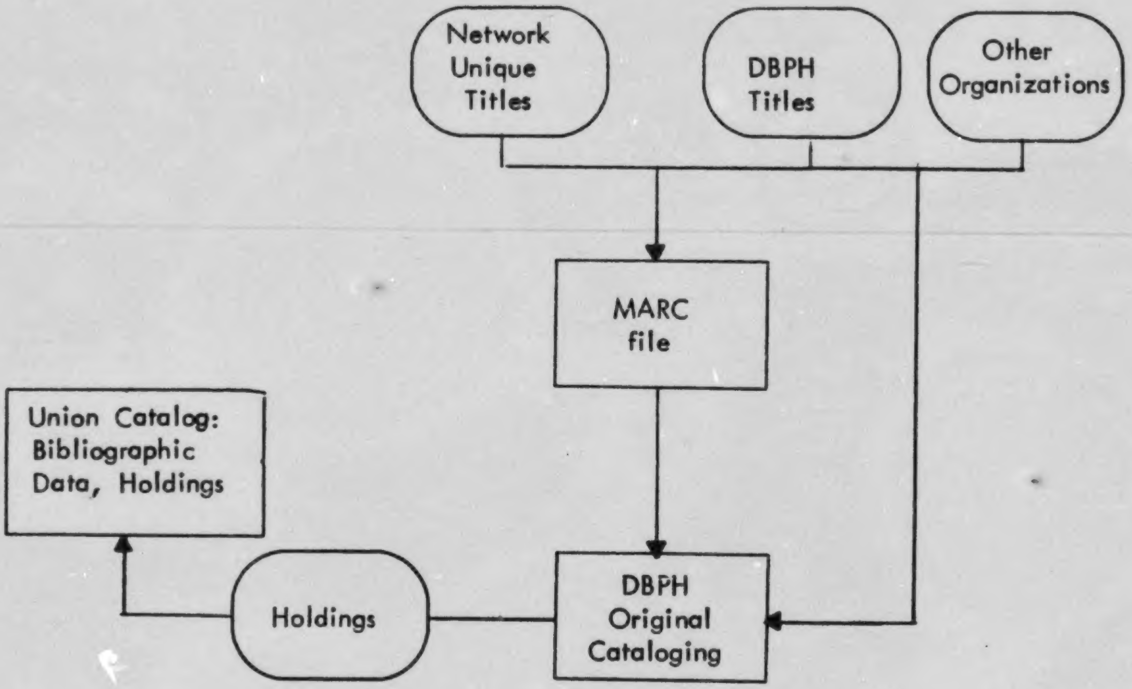


FIGURE IV-2

CATALOGING

### 4.2.1 System Accessibility

For the system to operate most efficiently, an access authority scheme must be established to identify personnel who are to access the system and the type of access available. Since the volume of activity can only be estimated at this time, no recommendation concerning the location of terminals has been made in this report. It is assumed, however, that there will be sufficient terminals available and that their placement can be assessed upon completion of the physical reorganization.

It is of the utmost importance that the security of the data base be maintained. In order to assure that changes to the data base are made by authorized parties only, security codes should be developed that permit appropriate parties to modify only those files in their area of major interest. In addition, Table IV-A was developed to graphically indicate the sections and staff permitted to interface with the system and the type of action involved.

Since some terms used may require further definition, we have included the following list of terms:

- Query - The ability to search for information, display the results, or request a printout.
- Change - The ability to query plus input, update, delete, merge, or sort data as necessary.
- Professional (P) - A professional librarian or the equivalent.
- Technician (T) - A non-professional with decision-making responsibility within the scope of the tasks assigned by a supervisor.
- Clerk (C) - A clerk-typist, secretary, or their equivalent.
- Indirect (I) - The section indicated requests that the action specified be accomplished by another section. (The term is used only in cases where volume of activity does not justify direct access to the system).
- Blank Square - No interface with the system.
- "Yes" - Direct interface with the system.

| File / Section | In-Process |  |  |  |  |  | Management |  |  |  |  |  | Union Catalog |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Query |  |  | Change |  |  | Query |  |  | Change |  |  | Query |  |  | Change |  |  |
|  | P | T | C | P | T | C | P | T | C | P | T | C | P | T | C | P | T | C |
| 1 Collection Development | Yes |  | Yes | Yes |  | Yes | Yes |  | Yes |  |  |  | Yes |  | Yes |  |  |  |
| 2 Processing | Yes |  |  | Yes |  |  | Yes |  |  | Yes |  |  | Yes |  |  | Yes |  |  |
| 3 Production | Yes |  | Yes | Yes |  | Yes | Yes |  | Yes |  |  |  |  |  |  |  |  |  |
| 4 Technical |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 Office Services | Yes |  | Yes | Yes |  | Yes | Yes |  | Yes | Yes |  | Yes |  |  |  |  |  |  |
| 6 Publication Services | Yes |  | Yes | Yes |  | Yes | Yes |  | Yes | Yes |  | Yes | Yes |  | Yes | Yes |  | Yes |
| 7 Reference | I | I |  |  |  |  | I | I |  |  |  |  | I | I |  |  |  |  |
| 8 Music | I | I |  |  |  |  | I | I |  |  |  |  | I | I |  |  |  |  |
| 9 Volunteer Training | I |  |  |  |  |  | I |  |  |  |  |  | I |  |  |  |  |  |
| 10 Volunteer Utilization | I |  |  |  |  |  | I |  |  |  |  |  | I |  |  |  |  |  |
| 11 Network Services | I |  |  | I |  |  | I |  |  | I |  |  | I |  |  | I |  |  |
| 12 Resources Coordination | Yes | Yes | I | I |  |  | Yes | Yes |  | I |  |  | Yes | Yes |  | I |  |  |
| 13 Circulation & Collection Maintenance |  |  |  |  |  |  |  |  |  |  |  |  | Yes |  | Yes |  |  |  |
| 14 Office of Chief | I |  |  | I |  |  | I |  |  | I |  |  | I |  |  | I |  |  |
| 15 Project Coordination Office | Yes |  |  | I |  |  | Yes |  |  | I |  |  | Yes |  |  | I |  |  |
| 16 Building Services |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 Material Dev. Office | I |  |  | I |  |  | I |  |  | I |  |  | I |  |  | I |  |  |
| 18 Network Dev. Office | I |  |  | I |  |  | I |  |  | I |  |  | I |  |  | I |  |  |

TABLE IV-A

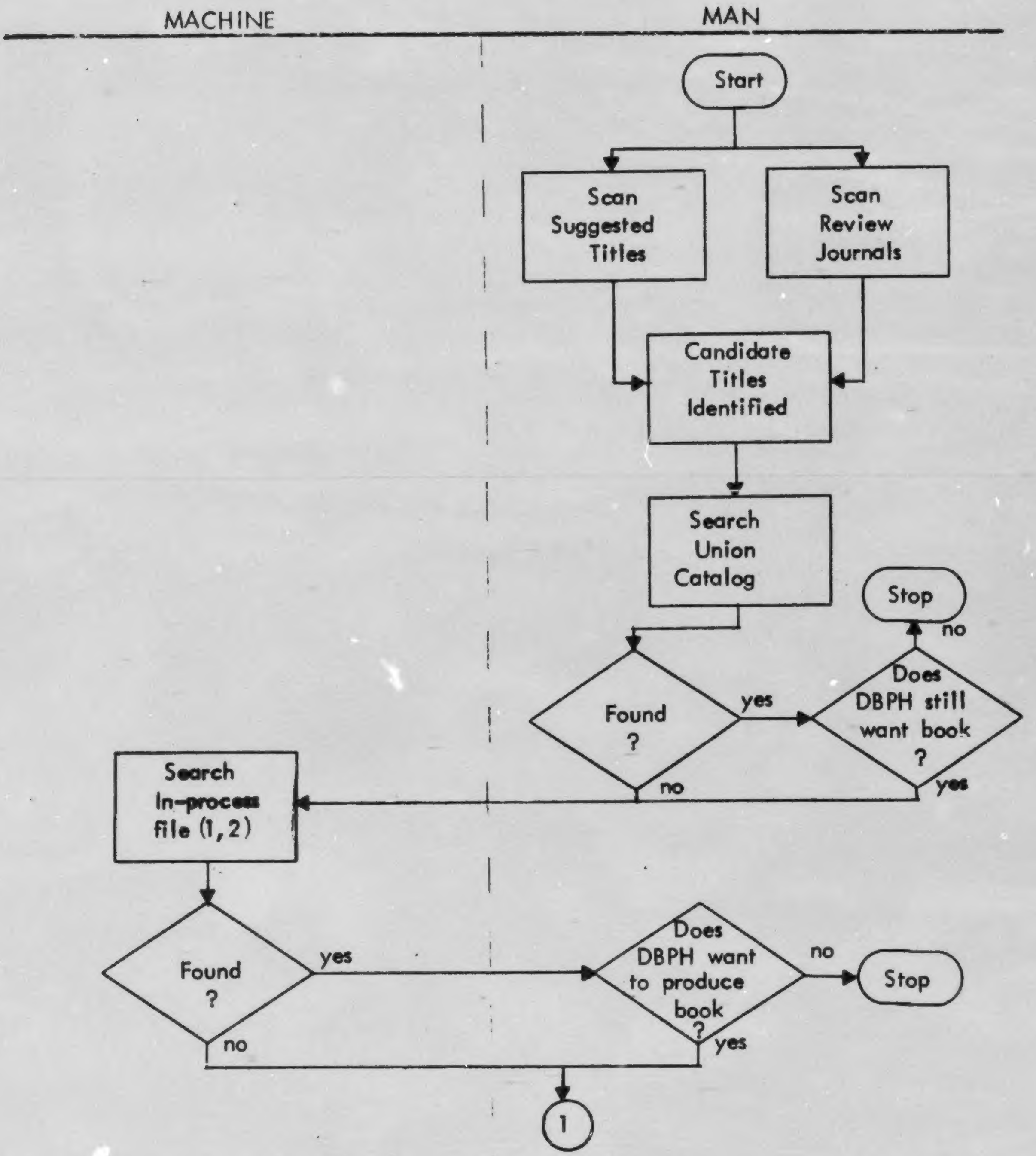
USER SYSTEM INTERFACE

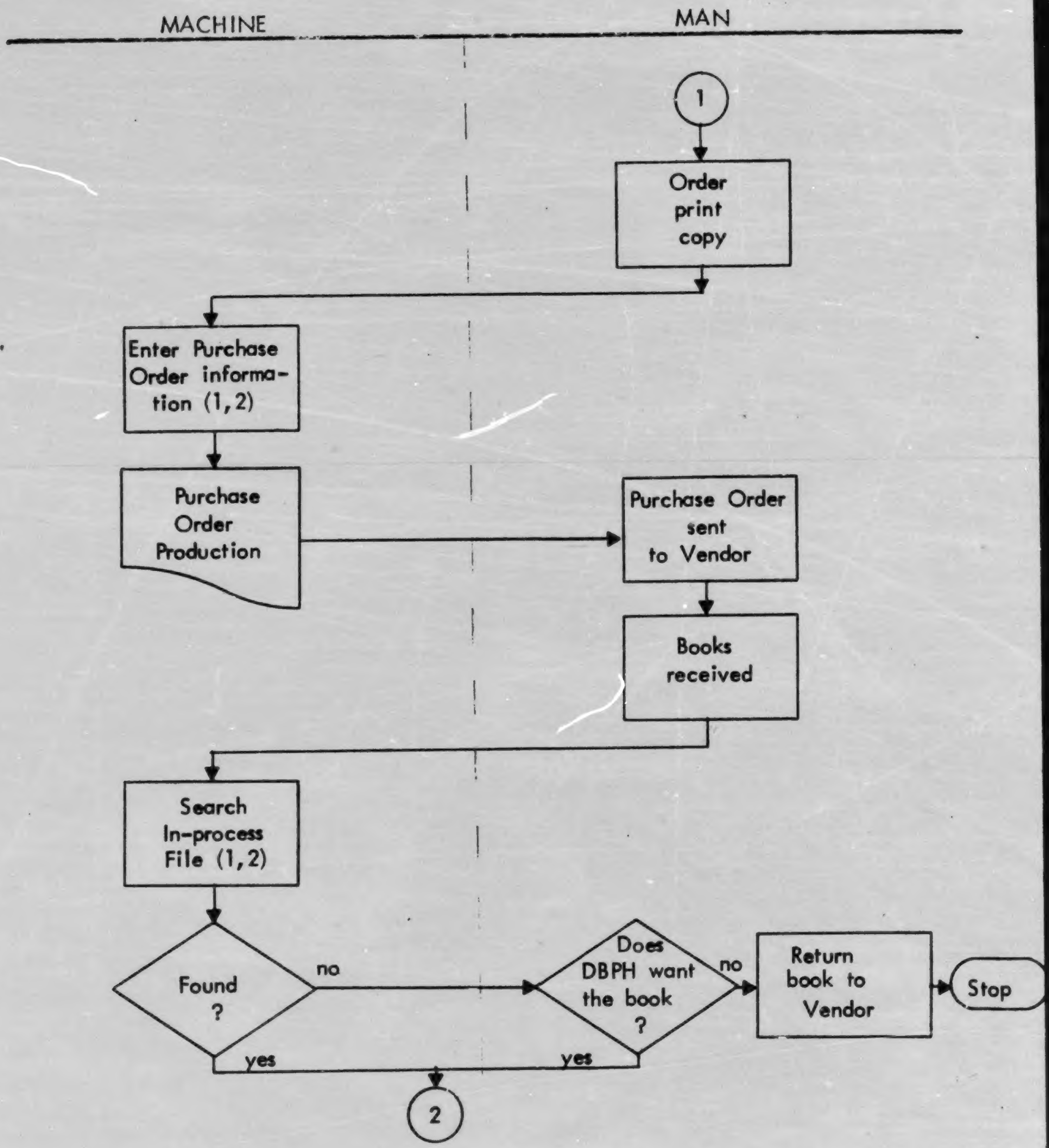
### 4.2.2 Man/Machine Procedures

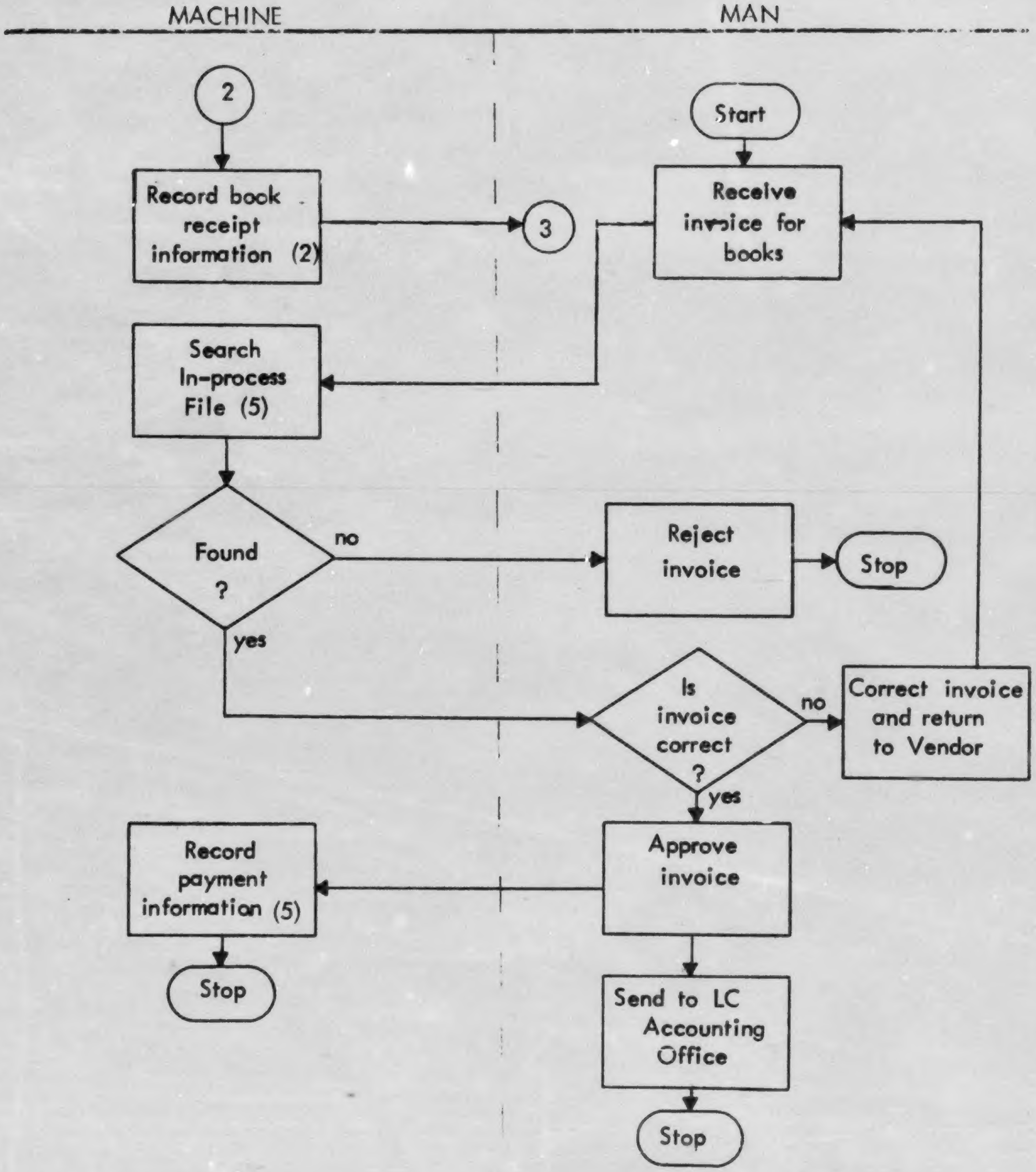
In addition to an overview of the system, the following flowcharts describe the man/machine interaction when one title passes through the system.

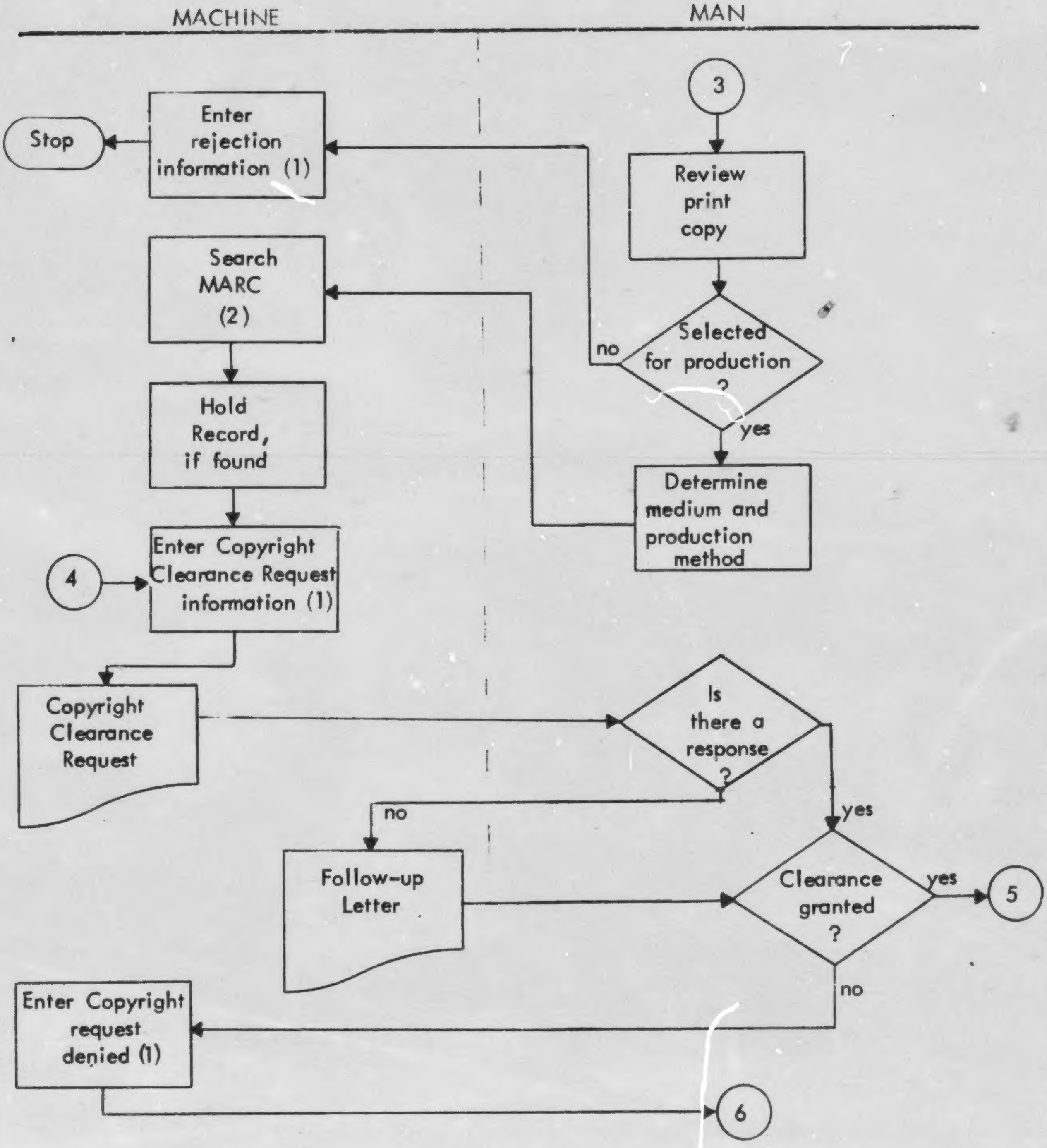
LEGEND: Numbers in parentheses refer to sections responsible:

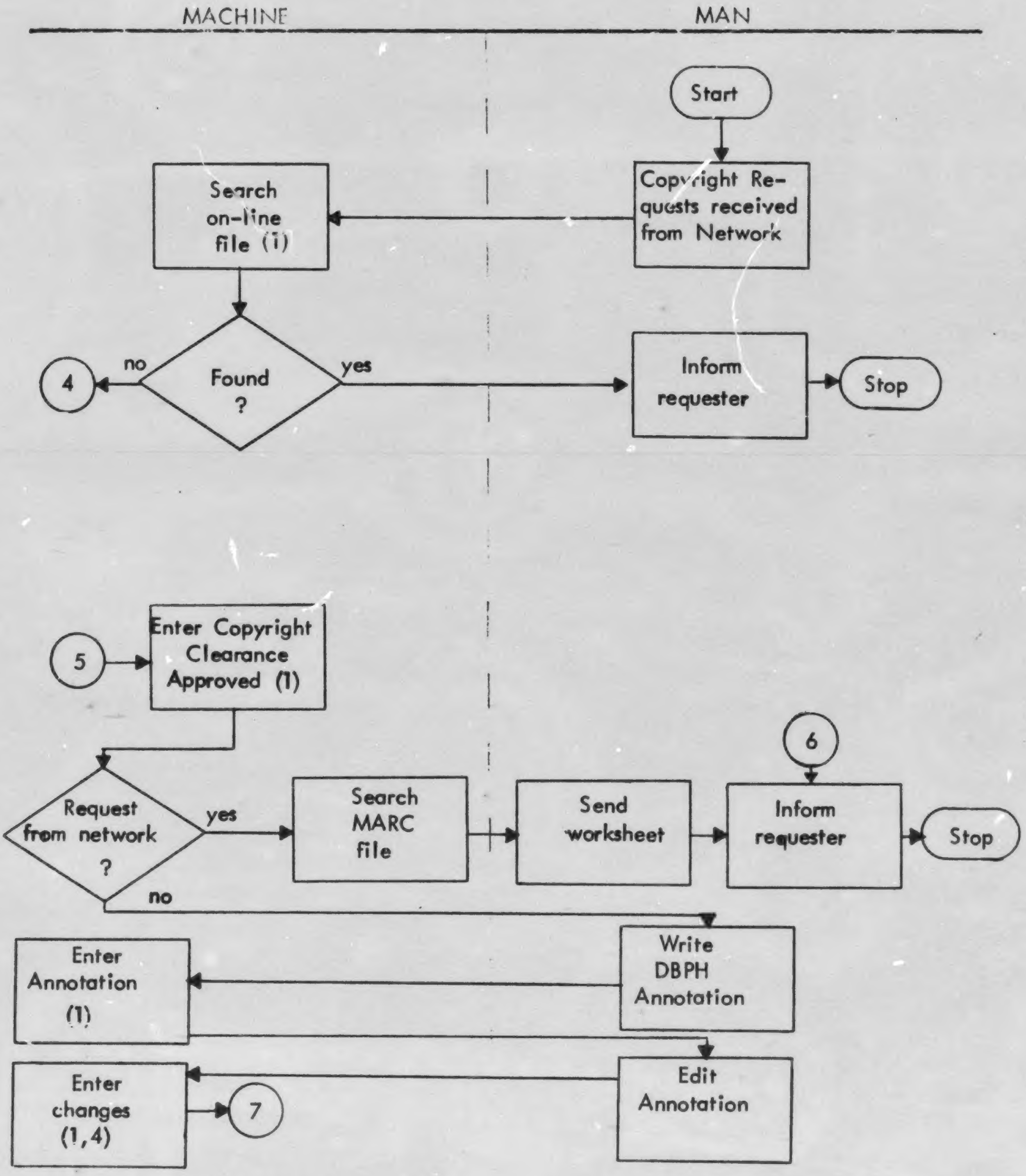
1 — Collection Development
2 — Processing
3 — Production
4 — Publication Services
5 — Office Services

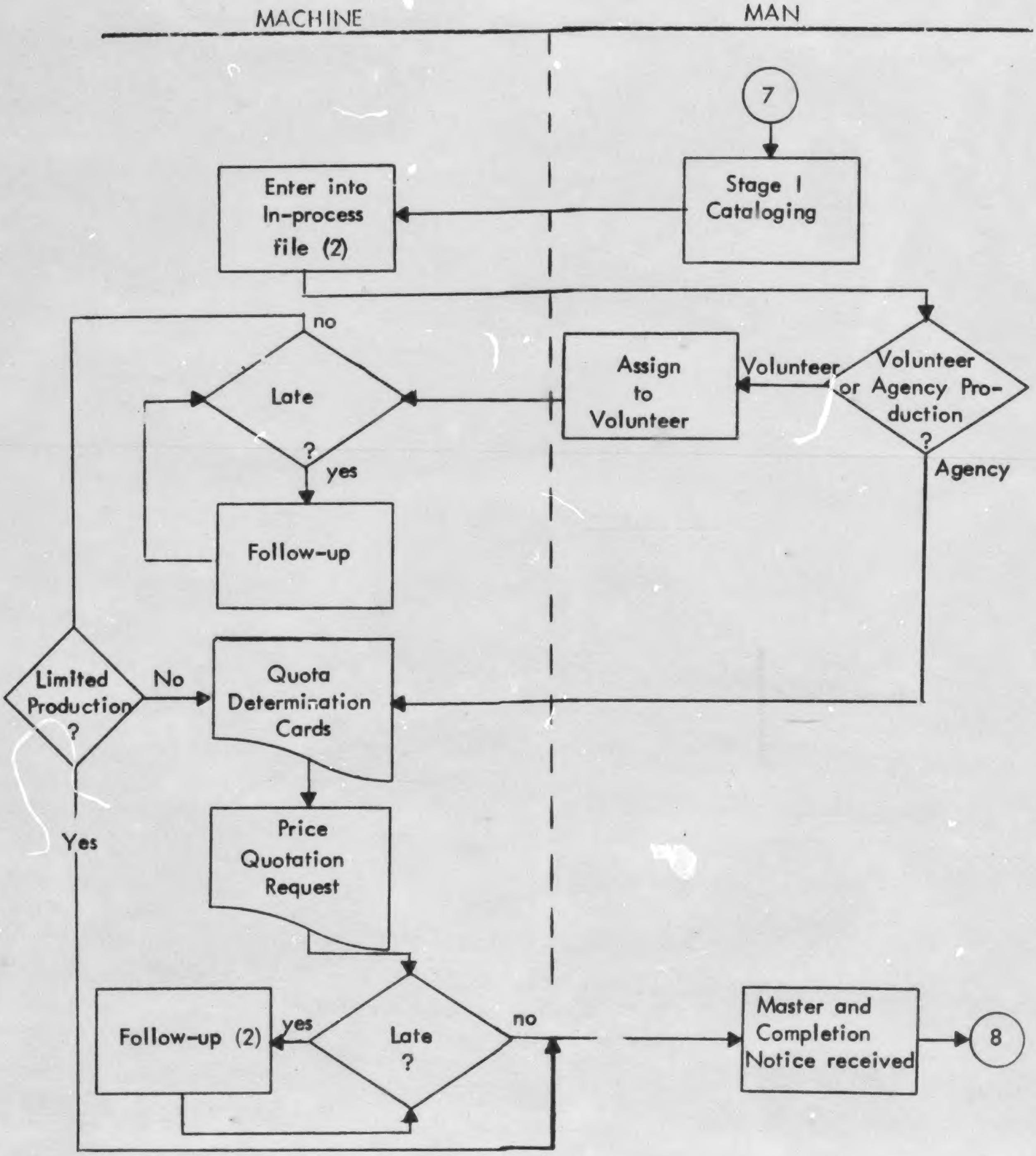
MACHINE
MAN
Start
Scan Suggested Titles
Scan Review Journals
Candidate Titles Identified
Search Union Catalog
Stop
no
Found ?
yes
Does DBPH still want book ?
no
yes
Search In-process file (1,2)
Found ?
yes
Does DBPH want to produce book ?
no
Stop
no
yes
1

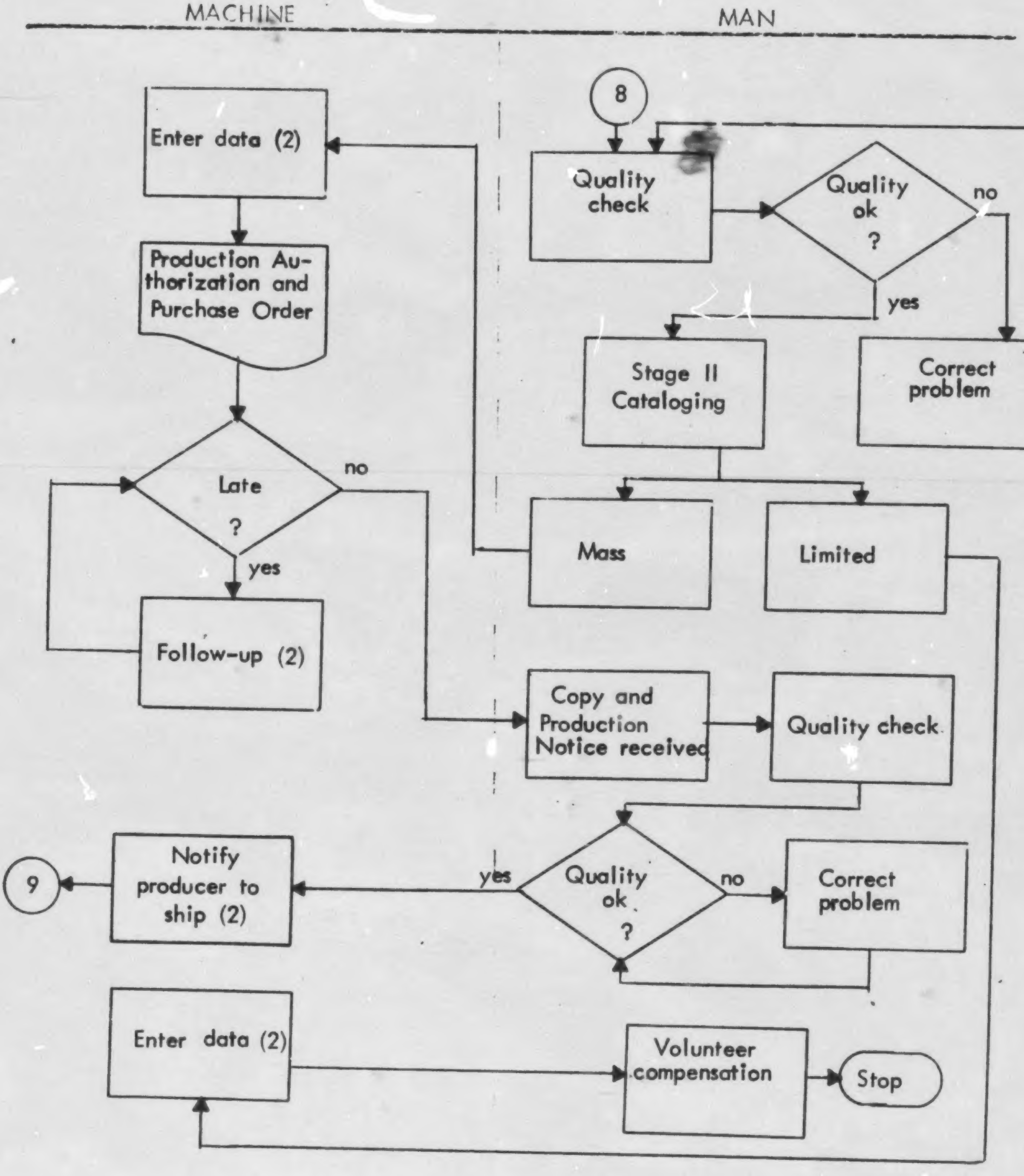

MACHINE
MAN
1
Order print copy
Enter Purchase Order information (1,2)
Purchase Order Production
Purchase Order sent to Vendor
Books received
Search In-process File (1,2)
Found ?
no
yes
Does DBPH want the book ?
no
yes
Return book to Vendor
Stop
2

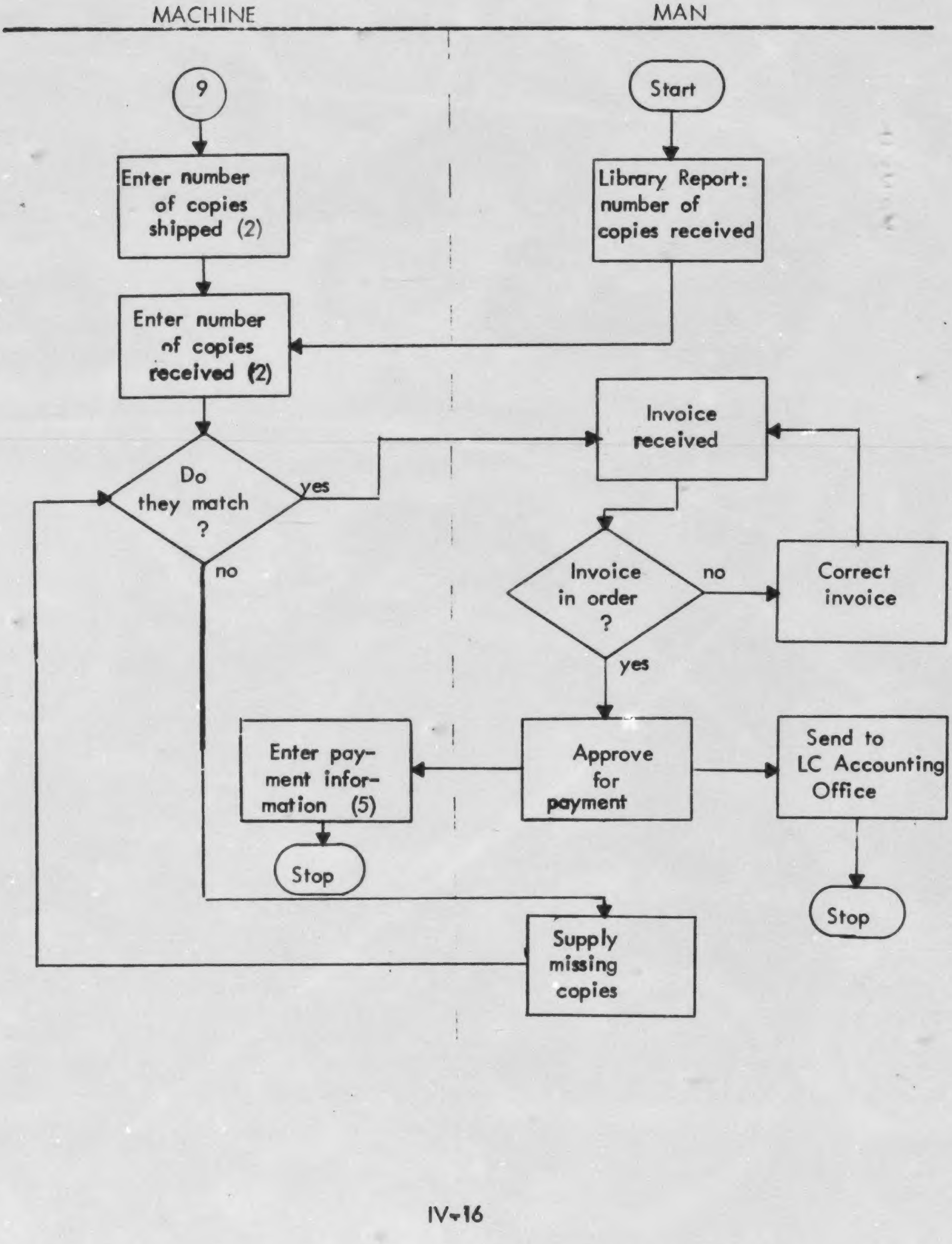

MACHINE
MAN
2
Start
Record book receipt information (2)
3
Receive invoice for books
Search In-process File (5)
Found ?
no
Reject invoice
Stop
yes
Is invoice correct ?
no
Correct invoice and return to Vendor
yes
Record payment information (5)
Approve invoice
Stop
Send to LC Accounting Office
Stop

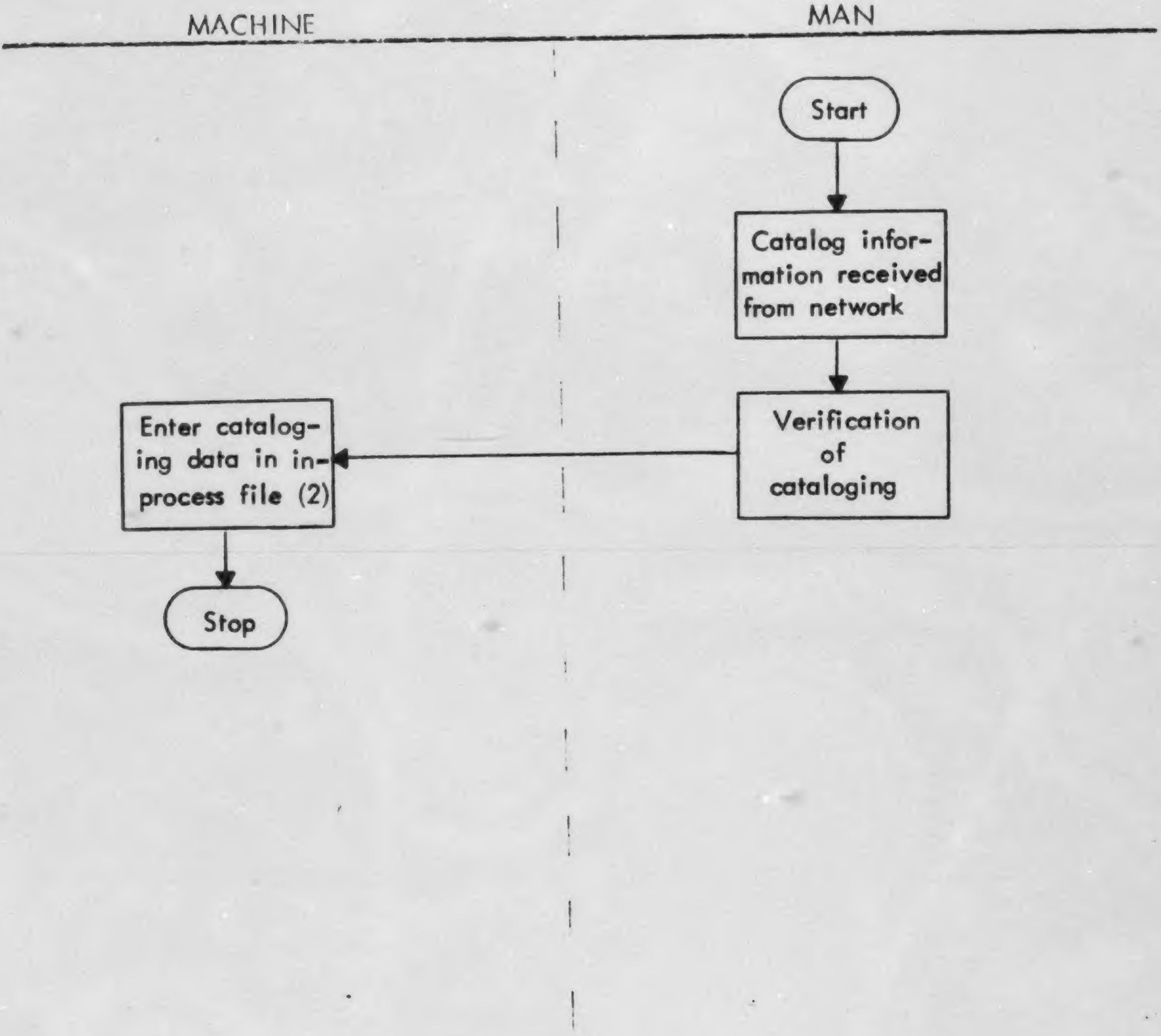

MACHINE
MAN
3
Stop
Enter rejection information (1)
Review print copy
Search MARC (2)
no
Selected for production ?
yes
Hold Record, if found
Determine medium and production method
4
Enter Copyright Clearance Request information (1)
Copyright Clearance Request
Is there a response ?
no
yes
Follow-up Letter
Clearance granted ?
yes
5
no
Enter Copyright request denied (1)
6

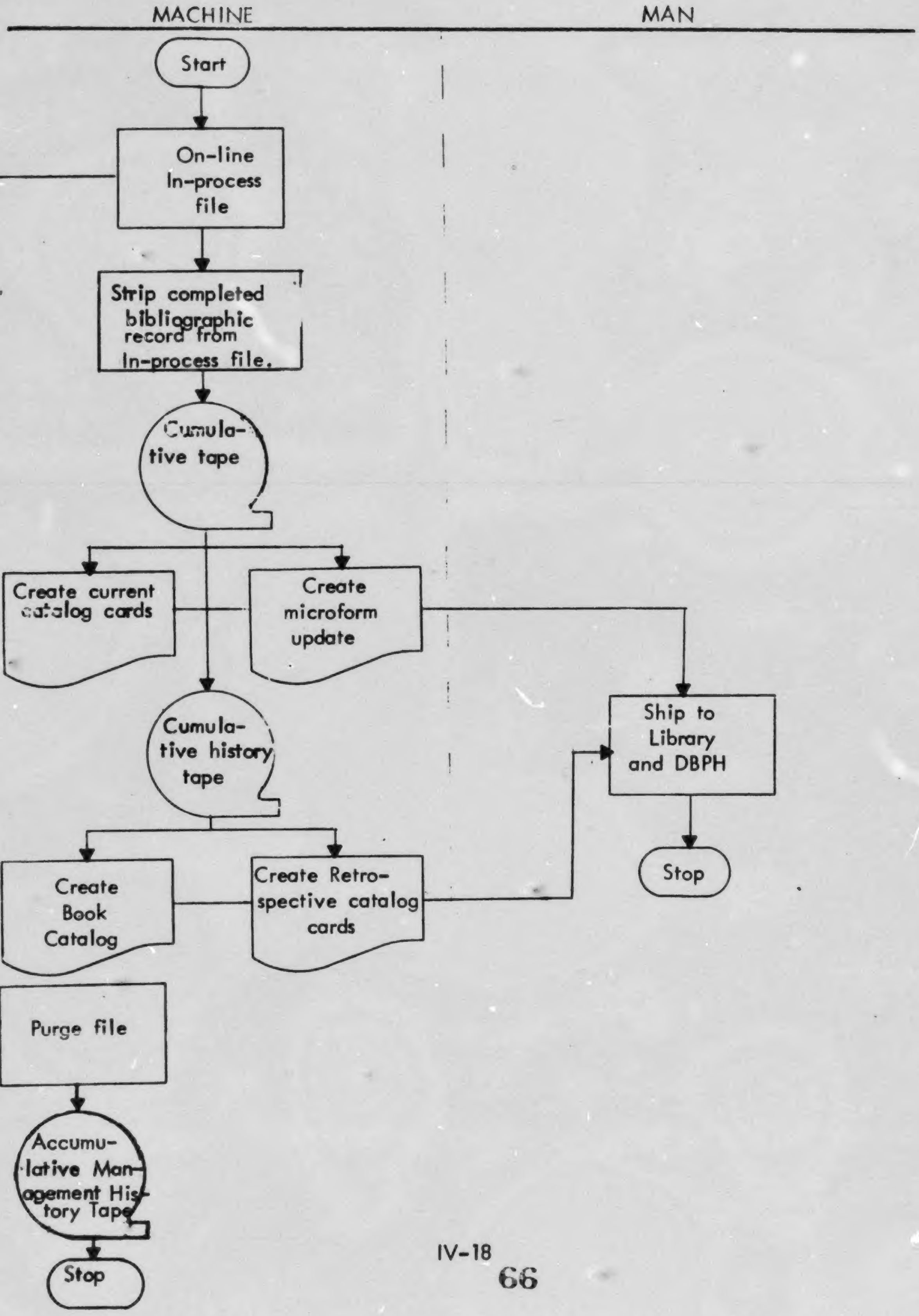

MACHINE
MAN
Start
Copyright Requests received from Network
Search on-line file (1)
Found ?
no
yes
4
Inform requester
Stop
5
Enter Copyright Clearance Approved (1)
6
Request from network ?
yes
no
Search MARC file
Send worksheet
Inform requester
Stop
Write DBPH Annotation
Enter Annotation (1)
Edit Annotation
Enter changes (1,4)
7


MACHINE
MAN
7
Stage I Cataloging
Enter into In-process file (2)
Volunteer or Agency Production ?
Volunteer
Agency
Assign to Volunteer
no
Late ?
yes
Follow-up
Limited Production ?
No
Yes
Quota Determination Cards
Price Quotation Request
yes
Follow-up (2)
Late ?
no
Master and Completion Notice received
8


MACHINE
MAN
8
Enter data (2)
Quality check
Quality ok ?
no
yes
Production Authorization and Purchase Order
Stage II Cataloging
Correct problem
Late ?
no
yes
Mass
Limited
Follow-up (2)
Copy and Production Notice received
Quality check
9
Notify producer to ship (2)
yes
Quality ok ?
no
Correct problem
Enter data (2)
Volunteer compensation
Stop


MACHINE
MAN
9
Start
Enter number of copies shipped (2)
Library Report: number of copies received
Enter number of copies received (2)
Invoice received
Do they match ?
yes
no
Invoice in order ?
no
Correct invoice
yes
Enter payment information (5)
Approve for payment
Send to LC Accounting Office
Stop
Stop
Supply missing copies


MACHINE
MAN
Start
Catalog information received from network
Verification of cataloging
Enter cataloging data in in-process file (2)
Stop


MACHINE
MAN
Start
On-line In-process file
Strip completed bibliographic record from In-process file.
Cumulative tape
Create current catalog cards
Create microform update
Cumulative history tape
Ship to Library and DBPH
Stop
Create Book Catalog
Create Retrospective catalog cards
Purge file
Accumulative Management History Tape
Stop

## 4.3 SYSTEM OUTPUT REQUIREMENTS

Output requirements of the system include products such as the Union Catalog, management reports, and statistical and selected listings from machine files, as well as products for outside agencies such as claim notices, follow-up letters, etc.

In this section, the outputs of each subsystem are identified. Each output is described in terms of its name, function and user, frequency, medium, filing sequence and minimum contents.

Operational experience and feedback from users may show that existing outputs require modification; therefore, all products should be reviewed by the Automated Systems Coordinator every 3 months for the first 2 years. Appropriate revisions, deletions, additions, and changes should be based on input gathered. After the system has been operational for two years, reviews should be conducted semiannually.

To supplement the feedback gathered from all users, it is recommended that a regular review mechanism be established and charged with reviewing the system on a semiannual basis. Representatives should include librarians from subregional and regional libraries, multi-state centers, Information Systems Office, MARC Development Office, Catalog Distribution Services, and DBPH staff.

Table IV-B summarizes all outputs defined.

| Sub-System | Name of Output | Function | Frequency |
|---|---|---|---|
| I | Purchase Order (Print Copy) Notice | Authorizes Vendor to ship print copy order to DBPH | On demand |
| I | Vendor Claim or Cancellation Notice | Acts as a reminder of outstanding print book orders as well as a notice of cancellation if applicable. | Automatic |
| I | Vendor Performance Report | Summarizes the number of titles in each category of "lateness," to provide management with means to monitor vendor performance. | Monthly |
| I | Copyright Request | Ask permission of a copyright holder to produce a title in braille, recorded media, etc. | On demand |
| I | Copyright Request Notice | Reports copyright request status to requester. | Automatic |
| I | Copyright Request Follow-up Notice | Serves as a reminder of pending request to copyright holder. | Automatic |
| I&M | Copyright Request Report Listing | Summarizes for the copyright holder, all copyright requests granted to DBPH. | On demand |
| I | Copyright Request Outstanding Listing | Lists all copyright requests outstanding for 6 months. | Monthly |
|  | Volunteer Profile Notice (Peripheral information for assignment purposes only) | Provides a thumbnail sketch of volunteers (individuals & agencies who produce books. For use by DBPH in assigning titles for production. | Annually |
| I | Request for Price Quotation | Informs the appropriate Studio of DBPH's intention of producing a particular title, and authorizes the studio to prepare the master. | On demand |

Subsystem Code:

I = In-Process Subsystem
M = Management Information Subsystem
U = Union Cataloging Subsystem

TABLE IV-B

SUMMARY OF OUTPUT REQUIREMENTS

| Sub-System | Name of Output | Function | Frequency |
|---|---|---|---|
| I | Production Authorization – Notice | Informs producing agency of DBPH authorization to start production of multiple copies of new titles. | On demand |
| I | Production Estimate Follow-up – Notice | Acts as a reminder to producing agency of promised completion date of new titles. | Automatic |
| I | Titles in Process – Statistical Summary | Informs DBPH management of the number of titles in various stages of the production cycle, i.e., print copy ordered, print copy received, copyright request pending, etc. | Monthly |
| I | Production Status Report – Statistical Summary | Summarizes for DBPH management the number of titles in each production status. | Monthly |
| I | Production Status Report Listing | Summarizes for DBPH management and producing agencies the current status of titles in production. | Monthly |
| I | Quota Cards Notice | Informs network libraries of available titles and number of copies assigned to them. Libraries may modify this number and return card to DBPH. | Monthly |
| I&M | Production Completion Report Listing | Provides DBPH and multi-state centers with a listing of all titles shipped during the period. | Monthly |
| I&M | Production Completion Report Library Listing | Provides a listing of the titles and number of copies shipped to a network library. | Monthly |
| I&M | Distribution Schedule Listing | Identifies for the producing agency the number of copies of a title to be shipped. | On demand |
|  | Mailing Labels Notice | Prepared by DBPH and used by producing agencies for distribution of newly produced titles. | On demand |

TABLE IV-B (cont'd)

SUMMARY OF OUTPUT REQUIREMENTS

| Sub-System | Name of Output | Function | Frequency |
|---|---|---|---|
| M | Quota Determination Listing | Provides a listing of the DBPH mass-produced titles selected by network libraries. | Monthly |
| I | Quota Determination – Statistical Summary | Summarizes monthly production figures for DBPH management | Monthly |
| I&M | Production Budget – Statistical Summary | Summarizes the average cost per title for each producing agency. | Monthly |
| I&M | Book Expenditures – Statistical Summary | Provides information on expenditures, by subject. | |
| U | Catalog Cards | Provides to libraries that require them, bibliographic records that can be interfiled in existing card catalogs. | On demand |
| U | DBPH Union Catalog | Provides DBPH and the network with authorative bibliographic and holdings information. | Annually |
| I | Union Catalog Monthly Update | Provides DBPH and the network with cumulated additions to the DBPH Union Catalog. | Monthly |
| I | Library Union Monthly Production (LUMP) | Provides DBPH and the network with information concerning in-process and rejected titles. | Monthly |
| U | Bibliographies (recurrent and on demand) | Provides the reader with selected listings of titles in accordance with special interests. | Irregularly |
| U | Talking Book Topics | Provides the reader with listings of new titles in various media. | Bimonthly |
| U | Braille Book Review | Provides the reader with listings of new titles in braille. | Bimonthly |
| U | Truncated Dewey Index – Listing | Shows titles in the Union Catalog that are classified by Truncated Dewey numbers to show collection strengths. | On demand |

TABLE IV-B (cont'd)

SUMMARY OF OUTPUT REQUIREMENTS

| Sub-System | Name of Output | Function | Frequency |
|---|---|---|---|
| U | Union Catalog Additions – Statistical Summary | Summarizes for DBPH management the number of titles added to (or deleted from) the Union Catalog with each annual cumulation. | Annually |
| U | Union Catalog Profile – Statistical Summary | Summarizes for DBPH management information about the collection, as reflected in the Union Catalog. | On demand |

TABLE IV-B (cont'd)

SUMMARY OF OUTPUT REQUIREMENTS

NAME: Purchase Order (print copy) Notice

FUNCTION: Authorizes Vendor to ship print copy order to DBPH

FREQUENCY: On Demand

MEDIUM: PRINT

FILING SEQUENCE: Not Applicable

CONTENTS:

- Vendor Name
- Vendor Address
- Date of Order
- Purchase Order Number (Print Copy)
- Author
- Title
- Publisher
- Date of Publication
- Edition
- Vendor Item Number
- Quantity of Print Copies
- DBPH Address
- Price

NAME: Vendor Claim or Cancellation Notice

FUNCTION: Acts as a reminder of outstanding print book orders as well as notice of cancellation if applicable

FREQUENCY: Automatic

MEDIUM: PRINT

FILING SEQUENCE: Not Applicable

CONTENTS:

- Vendor Name
- Vendor Address
- Date of Order
- Purchase Order Number (Print Copy)
- Author
- Title
- Publisher
- Vendor Item Number
- Cancelled

NAME: Vendor Performance Report - Statistical Summary

FUNCTION: Summarizes the number of titles in each category of "lateness," to provide management with means to monitor vendor performance

FREQUENCY: Monthly

MEDIUM: PRINT

FILING SEQUENCE: By Vendor

CONTENTS:

- Vendor Name
- Number of Titles Outstanding
  - 30 days
  - 60 days
  - 90 days
  - Cancelled
- Total by Vendor
- Total for all Vendors

**NAME:** Copyright Request

**FUNCTION:** Asks permission of a copyright holder to produce a title in braille, recorded media, etc.

**FREQUENCY:** On Demand

**MEDIUM:** PRINT

**FILING SEQUENCE:** Not Applicable

**CONTENTS:**

- Title
- Author
- DBPH Control Number
- Publisher
- Publication Date
- Edition
- Copyright Statement

NAME: Copyright Request Notice

FUNCTION: Reports Copyright Request status to requester

FREQUENCY: Automatic

MEDIUM: PRINT

FILING SEQUENCE: Not Applicable

CONTENTS:

- Name of Copyright Requester
- Address of Copyright Requester
- Author
- Title
- Publisher
- Date of Publication
- Edition
- Request Status
- Copyright Restrictions

NAME: Copyright Request Follow-up Notice

FUNCTION: Serves as a reminder of pending request to copyright holder

FREQUENCY: Automatic (30,60,90, etc., days)

MEDIUM: PRINT

FILING SEQUENCE: Not Applicable

CONTENTS:

Copyright Holder
Copyright Holder Address
Author
Title
Publisher
Date of Publication
Place of Publication
Edition
Follow-up Letter Number
Date of Copyright Request

NAME: Copyright Request Report Listing

FUNCTION: Summarizes for the Copyright Holder all copyright requests granted to DBPH

FREQUENCY: On Demand

MEDIUM: PRINT

FILING SEQUENCE: By copyright holder, subdivided by author and title

CONTENTS:

- Author
- Title
- Publisher
- Date
- Edition
- Date of Copyright
- Date of Copyright Clearance
- Copyright Holder
- Copyright Holder Address

NAME: Copyright Request Outstanding Listing

FUNCTION: Lists all copyright requests outstanding for 6 months

FREQUENCY: Monthly

MEDIUM: PRINT

FILING SEQUENCE: Author and Title

CONTENTS:

- Author
- Title
- Publisher
- Date of Publication
- Edition
- Copyright Holder
- Copyright Holder Address
- Date of Copyright Request

NAME: Volunteer Profile Notice

FUNCTION: Provide a thumbnail sketch of volunteers (individuals and agencies) who produce books. For use by DBPH in assigning titles for production.

FREQUENCY: Annually

MEDIUM: PRINT

FILING SEQUENCE: By state and city, and by volunteer

CONTENTS:

Volunteer Agency, Name
Volunteer Agency, Address
Equipment
Staff Size (if applicable)
Specialties
Language Skills
Contact person, Name
Contact person, Address
Contact person, telephone number
Certification level(s)

NAME: Request for Price Quotation

FUNCTION: Informs the appropriate studio of DBPH's intention to produce a particular title, and authorizes the studio to prepare the master

FREQUENCY: On Demand

MEDIUM: PRINT

FILING SEQUENCE: Not Applicable

CONTENTS:

- Producing Agency Name
- General Instructions
- Distribution Code
- DBPH Control Number
- Author
- Title
- General Classification
- Publisher
- Publication Date
- Special Instructions

NAME: Production Authorization Notice

FUNCTION: Informs producing agency of DBPH authorization to start production of multiple copies of new titles

FREQUENCY: On Demand

MEDIUM: PRINT

FILING SEQUENCE: Not Applicable

CONTENTS:

DBPH Book Number
Author
Title
Collation
Producing Agency Name
Producing Agency Address
Name of Reader
Annotation
Suggested Related Titles
Distribution Code
Total Cost
Total Number of Copies
Purchase Order Number
Production Authorization Date
Truncated Dewey Number

NAME: Production Estimate Follow-Up Notice

FUNCTION: Acts as a reminder to producing agency of promised completion date of new titles.

FREQUENCY: Automatic (30,60,90,etc., days)

MEDIUM: PRINT

FILING SEQUENCE: Not Applicable

CONTENTS:

DBPH Control Number
Author
Title
Publisher
Date of Publication
Edition
Date Production Authorization Sent
Estimated Completion Date
Follow-Up Number
Producing Agency Name
Producing Agency Address

NAME: Titles in Process - Statistical Summary

FUNCTION: Informs DBPH management of the number of titles in various stages of production cycle, i.e., print copy ordered, print copy received, copyright request pending, etc.

FREQUENCY: Monthly

MEDIUM: PRINT

FILING SEQUENCE: By stage of production cycle

CONTENTS:

Stage of production cycle

Number of Titles in production cycle

Total per category

Grand Total

NAME: Production Status Report - Statistical Summary

FUNCTION: Summarizes for DBPH management, the number of titles in each production status

FREQUENCY: Monthly

MEDIUM: PRINT

FILING SEQUENCE: By media, subdivided by producing agency

CONTENTS:

Media

Producing Agency Name

Selection Quota

Number of Titles Ordered

Balance to be Ordered

Number of Titles being recorded or stereotyped

Number of titles shipped

NAME: Production Status Report Listing

FUNCTION: Summarizes for DBPH management and producing agencies the current status of titles in production

FREQUENCY: Monthly and On Demand

MEDIUM: COM (Monthly)
PRINT (On Demand)

FILING SEQUENCE: Producing Agency

CONTENTS:

- Producing Agency Name
- Producing Agency Address
- Production Medium
- Special Instructions
- DBPH Control Number
- Author
- Title
- Date of Production Start
- Date of Production Completion
- Titles being recorded (30,60,90, etc., days)
- Titles authorized but not completed (30,60,90, etc., days)
- Titles shipped (30, 60, 90, etc., days)
- Titles not assigned to any producing agency
- Estimated cost

NAME: Quota Cards Notice

FUNCTION: Informs Network Libraries of Available Titles and Number of Copies assigned to them. Libraries may modify this number and return card to DBPH

FREQUENCY: Monthly

MEDIUM: PRINT

FILING SEQUENCE: Not Applicable

CONTENTS:

Library Name
Library Code
Library Address
DBPH Control Number
Title
Production Medium
Annotation
Author
Number of Copies Assigned
Publisher
Publication Date
Review Source
Number of Copies Requested

NAME: Production Completion Report Listing

FUNCTION: Provides DBPH and the Multi-state Centers with a listing of all titles shipped during the period

FREQUENCY: Monthly

MEDIUM: PRINT

FILING SEQUENCE: By media, subdivided by producing agency

CONTENTS:

DBPH Book Number
Author
Title
Date Shipped
Distribution Code
Producing Agency
Production Medium
Number of Titles Shipped

NAME: Production Completion Report Library Listing

FUNCTION: Provides a listing of the titles and number of copies shipped to a network library

FREQUENCY: Monthly

MEDIUM: PRINT

FILING SEQUENCE: By library, subdivided by media, then by producing agency

CONTENTS:

DBPH Control Number/Book Number
Author
Title
Date Shipped
Number of Copies Shipped
Library Code
Production Medium
Producing Agency

NAME: Distribution Schedule Listing

FUNCTION: Identifies for the Producing Agency, the number of copies of a title to be shipped

FREQUENCY: On Demand

MEDIUM: PRINT

FILING SEQUENCE: Library. Code

CONTENTS:

DBPH Control Number/Book Number
Title
Library Code
Brief Address
Number of Copies to be Shipped

NAME: Mailing Labels Notice

FUNCTION: Prepared by DBPH and used by producing agencies for distribution of newly produced titles

FREQUENCY: On Demand

MEDIUM: PRINT

FILING SEQUENCE: Not Applicable

CONTENTS:

- Producing Agency Name
- Producing Agency Address
- Library Name
- Library Address
- DBPH Book Number
- "1 of number of copies"

NAME: Quota Determination Listing

FUNCTION: Provides a listing of the DBPH mass produced titles selected by network libraries

FREQUENCY: Monthly

MEDIUM: PRINT

FILING SEQUENCE: By Library

CONTENTS:

DBPH Control Number/Book Number
Title
Author
Publisher
Date of Publication
Production Medium
Number of copies assigned by DBPH
Number of copies requested
Library

NAME: Quota Determination Statistical Summary

FUNCTION: Summarizes monthly production figures for DBPH management

FREQUENCY: Monthly

MEDIUM: PRINT

FILING SEQUENCE: By Library

CONTENTS:

Library
Number of titles selected, by medium to date
Number of titles authorized, by medium
Number of titles available for selection, by medium
Number of copies requested, by medium
Number of copies available for selection, by medium

NAME: Production Budget - Statistical Summary

FUNCTION: Summarizes the average cost per title for each Producing Agency

FREQUENCY: Monthly and On Demand

MEDIUM: PRINT

FILING SEQUENCE: Producing Agency

CONTENTS:

Producing Agency Name
Selection Quota
Number of titles authorized
Average number of records or volumes
Average number of copies
Average cost per title

NAME: Book Expenditures - Statistical Summary

FUNCTION: Provides Information on expenditures by Subject

FREQUENCY: Quarterly

MEDIUM: PRINT

FILING SEQUENCE: By Truncated Dewey Number

CONTENTS:

Truncated Dewey Number

Number of Titles in each category

Total cost by category

Total allocation by category

Balance to date

NAME: Catalog Cards

FUNCTION: Provides to libraries which require them, bibliographic records that can be interfiled in existing card catalogs

FREQUENCY: Retrospective Cards — Monthly for selected libraries
Current Cards — On demand

MEDIUM: PRINT

FILING SEQUENCE: Not Applicable

CONTENTS:

DBPH MARC data elements

NAME: DBPH Union Catalog

FUNCTION: Provides DBPH and the Network with authoritative bibliographic and holdings information about a title

FREQUENCY: Annually

MEDIUM: PRINT and MICROFICHE

FILING SEQUENCE: Alphabetic including both author and title in one sequence

Indexes By: Subject heading
Book Number
Narrator
Dewey Number (optional or as a replacement for one of the above)

CONTENTS:

1. Main Entry

   DBPH MARC data elements
   Holdings data

   *DBPH book number
   *Local book number
   *Collation
   *Lending conditions code
   *Library code

   Material Location Code (the minimum set of possible combinations)

   DBPH, multi-state, regionals, and subregionals
   DBPH, multi-state, and regionals
   DBPH, regionals
   Multi-state, regionals, and subregionals
   Multi-state, regionals
   Regionals, subregionals
   Regionals only

2. Index Entry (minimum requirements)

   Author
   Title

*Note: All volunteer produced materials will have the asterisked data elements as appropriate; DBPH produced material will have only the DBPH book number, material location code, and collation.

NAME: Union Catalog Monthly Update

FUNCTION: Provides DBPH and the Network with cumulated additions to the DBPH Union Catalog

FREQUENCY: Monthly

MEDIUM: MICROFICHE

FILING SEQUENCE: Alphabetic including both author and title in one sequence

Indexes By:
Subject heading
Book Number
Narrator
Dewey Number (optional or as a replacement for one of the above)

CONTENTS:

1. Main Entry

   DBPH MARC data elements
   Holdings data

   *DBPH book number
   *Local book number
   *Collation
   *Lending Conditions Code
   *Library code

   Material Location Code (the minimum set of possible combinations)

   DBPH, multi-state, regionals and subregionals
   DBPH, multi-state, and regionals
   DBPH, regionals
   Multi-state, regionals, and subregionals
   Multi-state, regionals
   Regionals, subregionals
   Regionals only

2. Index Entry (minimum requirements)

   Author
   Title

*Note: All volunteer produced materials will have the asterisked data elements as appropriate; DBPH produced material will have only the DBPH book number, material location code, and collation.

NAME: Library Union Monthly Production (LUMP)

FUNCTION: Provides DBPH and the network with information concerning in-process and rejected titles

FREQUENCY: Monthly

MEDIUM: MICROFICHE

FILING SEQUENCE: Alphabetic including both author and title in one sequence

CONTENTS:

Author
Title
Publisher
Publication Date
Status Code(s)
Status Date for each code

NAME: Bibliographies (recurrent and on demand)

FUNCTION: Provide the reader with selected listings of titles related to his/her special interests

FREQUENCY: Irregularly

MEDIUM: PRINT AND BRAILLE

FILING SEQUENCE: Author and Title or DBPH Book Number

CONTENTS:

Same as Talking Book Topics

NAME: Talking Book Topics

FUNCTION: Provides the reader with listings of new titles in various media

FREQUENCY: Bi-monthly, and cumulated biennially

MEDIUM: PRINT (Bibliographic data only, initially)

FILING SEQUENCE: DBPH book number, index by media and author/title within media

CONTENTS:

- General Classification
- Author
- Title
- DBPH Book Number
- Narrator
- Collation
- Annotation
- Publication Date

NAME: Braille Book Review

FUNCTION: Provides the reader listings of new titles in braille

FREQUENCY: Bi-monthly, and cumulated biennially

MEDIUM: BRAILLE AND PRINT (Bibliographic data only initially)

FILING SEQUENCE: Title

CONTENTS:

Same as Talking Book Topics, except for narrator

NAME: Truncated Dewey Index Listing

FUNCTION: Shows titles in the Union Catalog that are classified by Truncated Dewey Number, to show collection strengths

FREQUENCY On Demand

MEDIUM: PRINT

FILING SEQUENCE: Truncated Dewey Number

CONTENTS:

Truncated Dewey Number

Author

Title

DBPH Book Number

NAME: Union Catalog Additions — Statistical Summary

FUNCTION: Summarizes for DBPH management, the number of titles added to (or deleted from) the Union Catalog with each annual cumulation

FREQUENCY: Annually

MEDIUM: PRINT

FILING SEQUENCE: By Truncated Dewey Number and by Production Medium

CONTENTS:

Truncated Dewey Number
Number of titles added to each category
Number of titles deleted from each category
Production medium
Library code
Producing agency

NAME: Union Catalog Profile – Statistical Summary

FUNCTION: Summarizes for DBPH management, information about the collection, as reflected in the Union Catalog

FREQUENCY: On Demand

MEDIUM: PRINT

FILING SEQUENCE: By Truncated Dewey Number and by production medium

CONTENTS:

Same as Union Catalog Additions

## 4.4 UNION CATALOG REQUIREMENTS

### 4.4.1 Content and Format

The Union Catalog record should contain the full bibliographic description of a title, in accordance with the DBPH cataloging manual. It should also include holdings information described in terms of the material location code, book number, collation, lending conditions and producing library or agency code (if different from material location code). Exhibit IV-1 is an example of a complete entry in the Union Catalog. (See also output definition on page IV-20.)

The full record will be given under the main entry. The arrangement of the main body will be alphabetic including both author and title in one sequence. Indices should be provided under the following additional access points:

- Index term and/or subject headings
- Book number, including DBPH numbers
- Narrator
- Dewey number (optional or as a replacement for one of the above)

Index entries will refer the reader to the appropriate main entry (author or title) in the full record section of the catalog. If there is a DBPH book number, it will be included in the index entry.

### 4.4.2 Media and Frequency of Issue

The DBPH Union Catalog should be issued annually in print and microfiche. This is the major product of the DBPH Bibliographic Information System.

It is recommended that the hard copy version of the catalog be produced with 6 point type. This size will permit 3 columns of entries per page and should be readable on a continuous basis with ease by the normally sighted and those with minimal visual handicaps. A review of current literature and discussions with selected network librarians indicate that this size is acceptable. Almost all library book catalogs, many retail and parts stores (such as Sears, Roebuck & Co. and Ford Motor Co.), use 6 point type. Other organizations have even smaller sizes, including the Library of Congress' recently published

Stafford, Jean, 1915-
The collected stories of Jean Stafford.
New York, Farrar, Strauss and Giroux, 1969.
AFB

A collection of short stories centering on the individual and his or her relation to time and place, frequently set during the cocktail hour and the dinner party afterward.

CONTENTS: The innocents abroad.-The Bostonians.-Other manifestations of the American scene.-Cowboys and Indians.-Magic mountains.-Manhattan Island.

1. Short stories. 2. Identity. I. Benson, Esther, narrator.

PZ3.S7783Co 813.54 72-993097

| | | | | | |
|---|---|---|---|---|---|
| TB3389 | 1 | 26s. 10in. 16rpm 1144min. | | | DBPH Materials |
| BRA245 | 2 | 29v. handcopied | | | |
| CBA3742 | 3 | 17c. C-90 15/16ips | | | |
| | | DBPH FLMS MARL | | | |
| BRFLMS469 | FLMS | 30v. Handcopied | 2 | (ALRL) | Producing Agency |
| CBCARL3210 | CARL | 14c. C-120 1 7/8 | 1 | | |
| CBUTMS1758 | UTMS | 14c. C-120 1 7/8 | 2 | (ORRL) | |
| Local Book Number | Material Location Code | Collation Code | Lending Conditions | | |

## EXHIBIT IV-1

## SAMPLE UNION CATALOG ENTRY (SUGGESTED)

Film Catalog (5 point type) and information operator catalogs produced by many telephone companies (4 point type). The smaller sizes can cause some eye strain when used frequently.

To assure that this size type is fully acceptable, it is further recommended that a test catalog be produced and distributed to the DBPH network. After 3 months of usage, feedback should be sufficient to confirm this recommendation or to provide justification for a larger size or a different format, even though cost and the number of pages would be substantially increased by this adjustment.

It is also recommended that 42X reduction microfiche be produced. Microfiche will allow the use of a less expensive reader by the libraries than would be possible if the system were to utilize microfilm. In addition, a microfiche reader using multiple lens and capable of projecting an image on the wall for those with visual problems should be selected.

While it is less costly to issue the DBPH Union Catalog only in microform, there are significant advantages to be gained by issuing the Catalog in book form. For example, it is portable and relatively easy to handle and scan. Furthermore, it allows the insertion of notes and can be used for the initial reporting of unique titles and holdings of the network libraries. Lastly, the book catalog has a wider potential distribution outside of the network, i.e., to hospital libraries, etc.

### 4.4.3 Union Catalog Monthly Update

DBPH should issue an update to the Union Catalog each month. This update should cumulate monthly until the annual Union Catalog is produced. As in the annual Union Catalog, complete bibliographic information should be given under the main entry with indices by Subject Heading, Book Number, Narrator, and possibly Dewey Number as a minimum. Each index entry should contain author and title. The update should be issued in microfiche prior to the production of LUMP.

### 4.4.4 The Library Union Monthly Production

The Library Union Monthly Production (LUMP) will contain all titles in various stages of production ("live titles") as well as those titles that were considered but did not complete the process for reasons such as non-clearance of copyright and rejection for production ("dead titles").

4.4.4 continued

LUMP will consist of brief entries for "live" and "dead" titles including the status. The inclusion of "live" and "dead" titles in the LUMP file provides the network with the same scope of information available at DBPH. To search for any title, only three sources need be consulted: The Union Catalog, Union Catalog Monthly Update, and LUMP.

LUMP should be reissued monthly. At that time, all "dead titles" which have resided in the file for the required 5 year period will be permanently stored on a history tape. The probability of searching for a dead title after 5 years is low.

In view of the scope of LUMP and the fact that monthly reissues are desired, the only feasible medium is microform. The following is a comparison of LUMP in computer output microform (COM) and hard copy in terms of the currency of information, cost, and bulk. It is estimated that it would take the Government Printing Office a minimum of 6 weeks to produce and distribute a print issue of LUMP. At this rate of production, the lag time in terms of the currency of information would be compounded at each successive issue. In comparison, COM prepared by a service bureau has a turnaround time of 3 to 5 days. LC is considering acquiring in-house capability of producing COM.

In terms of production costs and bulk of the product, it is clear that COM is a favorable choice.

# SECTION V

# IMPLEMENTATION PLAN

## 5.1 OBJECTIVES AND SCOPE

This section discusses the proposed computerized bibliographic system as it relates to the existing 3-year plan, assessing hardware, software, and support requirements. One of four suggested computer facilities will be used in implementing the plan, and the pros and cons of each facility are explored. The four facilities, listed in order of descending feasibility, are:

1) The LC Information Systems Office,
2) The computer facility of another government agency,
3) The computer facility of a nongovernment agency,
4) A DBPH minicomputer facility.

Utilization of the LC Information Systems Office is the recommended approach for implementing the plan. This approach is designed to employ LC facilities and to supplement LC resources with outside contractual support, whenever necessary.

## 5.2 DBPH 3-YEAR AUTOMATION PLAN PARAMETERS

In preparation for developing an automated bibliographic control system, a 3-year automation plan was devised. An overall objective was specified, and various tasks and subtasks were delineated for each year or phase of the project. The 3-year plan should provide overall guidance in developing a complete system design and implementation schedule. It is understood that changes in requirements or other unforeseen developments may postpone, eliminate, modify, or add some tasks.

A number of tasks begun in Phase I will extend into the first half of Phase II. For example, the cataloging of the limited-production material and its subsequent conversion to machine-readable form will not be completed until the first half of fiscal year 1976. Funds for the conversion effort will come from fiscal year 1975 monies. A number of subtasks, however, such as the development of annotation guidelines and a DBPH-oriented MARC manual, have been identified and will be completed during the 1975 fiscal year.

The publication of the Union Catalog in book form will be a major product of this system. Because production of the first experimental working-document of the

5.2 continued

Union Catalog requires a great deal of manual effort, the recataloging of existing titles was begun during Phase I of the project. Publication of the first working-document will coincide with the completion of approximately 50 percent of the total system design. Production requirements will have to be considered in preparing the system design, since the catalog and its updates will eventually be a product of the system. See Table V-A for the highlights of the task, the current status and estimated expenditures.

By the end of the second year (fiscal year 1976), all of Phase I tasks should be completed, and Phase II tasks finished on schedule. Although money has been allocated for specific tasks, it is quite possible that changes will occur that will require a review of these tasks in order to reassign available resources.

The figures in Table V-B differ from the estimates in the original three-year plan based on information gathered in the course of this study.

The projected expenditures for the third year (Fiscal Year 1977), were based on preliminary estimates for producing the Union Catalogs. Subsequent analysis indicates that catalog production costs will be greater than originally anticipated. As a result more funds will be required to make up the difference, otherwise funds projected for Tasks B-D will have to be reduced or eliminated. If the latter option is selected, the projected time frame for system development will have to be revised in conformance to available funding. The dollar figures on Table V-C represent the latter option. If all tasks are funded at an adequate level, an additional $83,000 will be required.

The need for funding system development should continue into this year. Temporary personnel probably will also be required for completing major input and editing and reviewing data. However, this should be the last year for system development and file-building. DBPH can, therefore, concentrate on system maintenance and improvement.

The following summarizes expenditures under the 3-year plan:

| | |
|---|---|
| PHASE I - Fiscal Year 1975 | $260,000 |
| PHASE II - Fiscal Year 1976 | 267,000 |
| PHASE III - Fiscal Year 1977 | 267,000 |
| Total 3-Year Plan | $794,000 |

| TASKS | STATUS | EXPENDITURES |
|---|---|---|
| TASK A - Bibliographic Record Development<br>• Review catalogs for completeness, relevancy, accuracy, and coverage, by conducting a physical inventory and reviewing for conformity to applicable standards;<br>• Develop recataloging procedures, including record formats. | In process. To be completed by the Retrospective Cataloging Project: 12,000 mass-produced titles finished and 22,000 limited production begun. All manuals, procedures, and forms developed. | $185,000 |
| TASK B - Systems Study<br>• Review DBPH operations;<br>• Interview selected regional and subregional libraries;<br>• Review existing hardware systems;<br>• Recommend system to convert previously cataloged titles to machine-readable formats;<br>• Recommend system for handling requirements on a continuing basis. | In process and will be completed with the acceptance of this report. | 40,000 |
| TASK C - Catalog Record Conversion<br>• Convert recataloged titles to machine-readable form. | RFP issued and expect to award this fiscal year. | 35,000 |
| TASK D - System Development Initiation<br>• Prepare basic outline of and controlling programs for the system. | In process. Basic steps have begun. If system recommended is acceptable, ISO will submit a more detailed outline and system specifications. | -0- |
|  | TOTAL | $260,000 |

TABLE V-A

PHASE I: SYSTEMS, ANALYSIS, DESIGN AND FILE-BUILDING - FY1975

TOTAL FUNDS AVAILABLE: $260,000

| TASKS | STATUS | EXPENDITURES |
|---|---|---|
| TASK A - System Development and Implementation<br>• Develop, test, and debug software;<br>• Select hardware;<br>• Document system. | To be initiated after system study accepted. Initial terminals selected. | $ 86,500 |
| TASK B - Production of Initial DBPH Catalogs<br>• Produce hardcopy and microform version of 12,000 converted titles;<br>• Produce hardcopy and microform version of limited and mass titles (Union Catalog). | To be initiated as soon as machine-readable records are produced and format is accepted. Waiver to use Videocomp at LC granted. | 108,500 |
| TASK C - Input Cataloging Data for Remaining Titles<br>• Gather bibliographic data on tactile and recorded titles produced by affiliated agencies and volunteer groups. | Initial planning has begun. | 72,000 |
|  | TOTAL | $267,000 |

TABLE V-B

PHASE II: SYSTEM DEVELOPMENT AND IMPLEMENTATION - FY1976

TOTAL FUNDS REQUESTED: $267,000

| TASKS | STATUS | EXPENDITURES |
|---|---|---|
| TASK A - System Outputs<br>• Produce hardcopy and microform Union Catalog;<br>• Produce monthly accumulated catalogs, in-process listings, etc. | To be developed from system design and development in Phase II. | $203,000 |
| TASK B - System Development and Testing<br>• Integrate, monitor, review, and complete system;<br>• Establish operating criteria, interfaces, and define network data; e.g., flow, rate, media. | To be developed by documenting entire system flow of operation procedures and user interface. | 24,000 |
| TASK C - Additional System Input, Especially Non-LC Produced Titles | To be developed after system is operational. | 25,000 |
| TASK D - Additional System Hardware<br>• Define additional hardware requirements;<br>• Lease hardware. | To be developed after system is operational. | 15,000 |
|  | TOTAL | $267,000 |

TABLE V-C

PHASE III: SYSTEMS INSTALLATION, TESTING, AND MONITORING - FY1977

TOTAL FUNDS REQUESTED: $267,000

## 5.3 UNION CATALOG PRODUCTION COSTS

The start-up year production costs for two issues of the Union Catalog in book and microfiche forms are estimated at $108,420 for the 32,437 mass production and limited-production titles. Cost estimates assume 500 copies per issue and a 42X reduction ratio for fiche products. Calculations are shown in Appendix D.

As additional software capabilities are made available, production costs will increase to cover a greater range of products. It is estimated that $203,006.64 will be required to cover the first year of regular production. This amount covers the book and microfiche catalog issued annually, monthly updates in fiche, and issues of the Library Union Monthly Production in fiche. Since over $192,000 of the costs for the first year of regular production is earmarked for the Union Catalog in book format and since this cost will increase as more titles are added, it is recommended that during the initial production stages DBPH analyze very carefully the demand for this product and the uses to which it is being put.

It should be pointed out that the cost figures just quoted reflect the update procedure referred to in Appendix D. The procedure calls for monthly cumulations of titles processed since production of the previous Union Catalog. Using this method of update requires the user to check the annual and monthly issues of the Union Catalog to complete a search. Built-in cost savings are derived by using the CDS Videocomp to generate camera-ready masters. Finally, if on-line access becomes available to the network libraries, monthly production of all catalogs should be eliminated and a more flexible schedule for emergency backup purposes and distribution to non-network libraries developed.

## 5.4 PHASE II: POSSIBLE ALTERNATIVES FOR IMPLEMENTATION

Four alternative computer facilities for implementation are:

1) LC Information Systems Office,
2) Other government agency computer facilities,
3) Commercial contractor, and
4) DBPH minicomputer facility.

The advantages and disadvantages of each method are considered in terms of operational efficiency, user acceptance, maintenance of system integrity, and impact on DBPH's overall service. An illustration of possible applications for each alternatives is included as a guide for evaluation.

### 5.4.1 LC Information Systems Office (ISO) -- Computer Facility

Given DBPH requirements, this alternative has many unique advantages and a few significant disadvantages.

Advantages:

1. Basic software, such as the present Order Control System, BIBSYS, SCORPIO, and other supporting software needed to manipulate the MARC data base and to meet DBPH requirements, are all located at ISO. ISO personnel are familiar with related systems at LC, such as the Videocomp in the Catalog Distribution Service and its related software.
2. The existing Order Control System provides a sound foundation on which to build the system described in Section IV. If modified and enhanced, it could meet system requirements, thus obviating the necessity for an extensive development effort.
3. Because extensive development would not be necessary, it is probable that this is the only alternative that would meet the deadline set in the 3-year plan.
4. At present, DBPH does not reimburse ISO for the use of its facilities (software and hardware) or for money expended for system design and program development when performed by staff members.

Disadvantages:

1. There is no written Library of Congress administrative commitment concerning a DBPH development effort at ISO.
2. Adequate CPU and disc storage is not available; however, the current upgrading of ISO hardware should remedy this shortcoming.
3. Significant discrepancies exist between BIBSYS and the internal MARC processing format developed by the MARC Development Office (MDO). BIBSYS will be usable only if ISO modifies it to accommodate DBPH records developed in accordance with the internal MARC standards.
4. DBPH may be unable to monitor ISO operations closely enough to assure a high priority for the project and guarantee adherence to schedules and completion of milestones.

5.4.1 continued

Illustration:

Descriptions of available resources and the current DBPH system illustrate the viability of developing the DBPH bibliographic system at ISO. Three major operational bibliographic systems at ISO are available to support development of the DBPH system. They are:

a) MARC System -- Providing on-line retrieval of the entire MARC data base,

b) SCORPIO -- Providing on-line information retrieval, and

c) BIBSYS -- Providing complete file maintenance, file inversion, report production, and retriever capability allowing up to 30 queries using Boolean logic.

ISO also has experience in formatting MARC records for the Catalog Distribution Service (CDS) Videocomp Unit which produces electronic photocomposition of hard copy output and for a COM unit.

The operational DBPH system maintains partial control over the production process, from the ordering of print review copies of the final production of DBPH material in special media, and the collection of associated bibliographic information. Production and local bibliographic data are contained in the In-Process File. With the generation of a book order for a print review copy, an in-process record is created for each title. It is edited and updated with additional control information as the book continues through production.

The In-Process File is on-line for editing and update and may be accessed by the DBPH control number, title, media, agency, studio, Dewey Number, general classification, copyright status, volunteer status, order status for catalog cards (limited-production material), MARC request status, print-book status, and payment status, or a combination of any of the above (e.g., a search for all books being produced in braille by a volunteer).

The Master Bibliographic File contains information required for cataloging and bibliographic control of DBPH material. A full record is created for each title by accessing the MARC data base and extracting all matches, stripping unwanted tags from the MARC record, adding special local DBPH tags from the In-Process File, and inserting an annotation.

The DBPH system interfaces in a batch mode with the MARC data base to obtain bibliographic information used in cataloging. Using the MARC data base, 85 percent of the searches for mass-production titles and 60 percent of the searches for limited-production titles are successful.

5.4.1 continued

DBPH does not reimburse ISO for services provided by staff members or for use of software systems provided by that facility. However, it would be necessary for DBPH to provide supplemental funds for ISO outside contracts and for hardware expenses not included in their budget. ISO administrators have indicated that the amount required for outside contracts would be less than that used for any of the other alternate facilities.

Estimates are given below:

System Development Costs

| | | | |
|---|---|---|---|
| A. | Contract personnel costs (based on industry standards of $50,000 per person year) | | |
| | Programmer, 9 person-months | $ 37,500 | |
| | Programmer, 6 person-months | 25,000 | |
| | | | $ 62,500 |
| B. | Hardware costs (computer usage and terminal leases) @ $6.00 per hour for 4,000 hours (four terminals @ 4 hours per day average usage over 50 weeks) | | $ 24,000 |
| C. | Software costs (no charge for usage) | | -0- |
| | | Total Cost | $ 86,500 |

Operational expenses for this system are based upon conversations with ISO personnel and should fall within an acceptable and reasonable range. DBPH would have to pay for hardware if these expenses cannot be absorbed by the ISO budget. No charges are expected for utilization of ISO software. Most DBPH expenses could be defrayed through a transfer of funds. The following is an estimate of DBPH expenses:

| | | | |
|---|---|---|---|
| A. | Hardware costs | | |
| | 1) | Lease of terminals and related equipment | $ 10,000 |
| | 2) | CPU usage at $6.00 per hour for 5,000 hours, based on five terminals at 4 hours per day for 50 weeks | $ 30,000 |
| B. | Software costs (no separate estimates can be made) | | -0- |
| | | Total cost per year | $ 40,000 |

Other advantages of using ISO not associated with costs are discussed in Section 5.5. These "value-added" features are important considerations to DBPH and the goals of the proposed automation system.

### 5.4.2 Other Government Agency Computer Facilities

The second alternative is to utilize the computer facilities of another government agency.

Advantages:

1. DBPH would have fiscal control over the project.
2. A system could be developed and operated at less cost at another government agency than at a commercial firm.
3. Since DBPH would not have to add staff to develop and/or operate the system, personnel costs could be kept to a minimum.
4. Start-up time would be less than for a commercial firm or a DBPH minicomputer system.
5. DBPH would be able to use, with modifications, some of the system design and software being developed or already completed for other government agencies.
6. The hardware, system availability, and system accessibility thus obtainable would exceed DBPH requirements.

Disadvantages:

1. The price for development and operation at another government agency will exceed ISO projected costs. This may mean that other tasks listed in the 3-year plan, such as the recataloging of outstanding material from network libraries, volunteer organizations, and cooperating agencies, will have to extend over a longer period of time in order to assure adequate funding.

2. While DBPH can maintain financial control over a government contractor, contract compliance cannot be absolutely guaranteed. The difficulties inherent in the effective monitoring of a system in another government agency could hinder completion of the project within the parameters of the 3-year plan.

3. Implementation of the project would also be stalled by time spent on transfer, start-up, and development at another agency. While such basic systems as BIBSYS can be transferred, they would have to be modified, or another system would have to be developed. The existing DBPH system would have to be entirely rewritten.

4. Demands placed on the facility by internal users might reduce DBPH access to an unacceptable level. Furthermore, access to MARC would have to be gained through another system, such as ISO, OCLC, BIBNET, etc., and appropriate records would have to be transferred to the selected computer system.

5. Although another government agency would run the system, a contract for the system design and programming would have to be put out on bid to a contractor. The successful bidder's staff would probably need time to become familiar with the division's operations and requirements.

6. One calendar year beyond the timetable projected by ISO would probably be required to implement the system, even though the estimated 5 man-years for analysis, design, and programming remains feasible. Furthermore, turnover in personnel at the contractor's facility might prolong this process.

Illustration:

Several government computer facilities can be used by DBPH. The National Institutes of Health (NIH) facility located in Bethesda, Maryland, operates two large IBM computers with a total telecommunication capability sufficient to support comprehensive remote job entry from user terminals located anywhere in this country.

The NIH main-system computer programs appropriate for library applications are:

1. WYLBUR -- A text editor and remote job entry system that allows a user to communicate on-line to create, modify, store, and retrieve textual data.

2. Inquiry and Reporting System (IRS) -- A commercially available data-retrieval and report-generation software package.

These programs are operational and have already been utilized by government libraries. The Department of the Interior Library has developed the capability to process library-related information, including the MARC records, which would also be useful to DBPH.

The estimated cost of running the DBPH system on the NIH computer is lower than on a commercial system. The average fee for computer usage is $10.00 per terminal hour. This is based on $6.00 per hour for CPU usage and $4.00 per hour for software usage. If this alternative is chosen, DBPH would have to purchase the IRS system for $25,000 (GSA schedule) or establish a leasing arrangement. The following is a list of estimated expenditures for this approach:

| | | |
|---|---|---|
| 1. | Hardware and systems costs | $ 80,000 |
| 2. | Software costs (including purchase of IRS) | 70,000 |
| 3. | Programming costs | 100,000 |
| | Total cost | $250,000 |

After completion of the development phase, operational expenses should average out at $45,000 per year. This figure is based on the following estimated usage:

| | | |
|---|---|---|
| 1. | Terminal hours per year: 4500 | |
| 2. | Hardware costs (@ $6.00 per hour) | $ 27,000 |
| 3. | Software costs (@ $4.00 per hour) | 18,000 |
| | Total cost per year | $ 45,000 |

Costs would be spread over a 2.5-year period. If ISO is able to provide the necessary terminals, DBPH could use its remaining hardware funds to offer on-line access to the Multistate Centers. If DBPH paid for all procurements, the network would not have on-line access until the third year.

### 5.4.3 Commercial Contractor Facility

The third alternative is a service bureau.

**Advantages:**

1. DBPH could maintain fiscal control and, in view of competitive pressures in today's market, guarantee contract compliance.
2. Since the contractor would develop and operate the system, DBPH would not have to hire additional personnel directly.
3. Depending on the vendor, DBPH might be able to tap outside experience gained in developing other MARC-based systems. In fact, preprogrammed packages that would meet some DBPH needs may already be fully developed.

**Disadvantages:**

1. Development and computer costs will be higher here than with other alternatives, which could mean that some elements of the 3-year plan might have to be postponed or abandoned.
2. Most of the programs already written for DBPH could not be transferred; thus, considerable time and additional funds would have to be spent to produce an operational system. In fact, the delays might push project deadlines beyond the allotted 3-year period.
3. The high rate of on-line terminal usage charges could make the costs of operating this system prohibitive.

**Illustration:**

Inforonics, Inc. is now collaborating under this type of contractual relationship with the National Oceanic and Atmospheric Administration, the Boston Public Library, and other libraries.

To operate this system, DBPH would need access to a computer system. DBPH would have an option to lease or purchase the software for use on internal hardware. If DBPH decides to use the contractor's computer facility, it would have to acquire a dial-up ASCII or a 2741-type terminal. By placing a local call, DBPH could interact with the contractor's hardware (time-shared PDP-10

5.4.3 continued

computer) and software. Commercial prices per terminal hour range from $25.00 to $40.00, depending on the Central Processing Unit (CPU) and on-line storage requirements. An additional $11.00 per hour communications charge might also be applied if a long distance computer telecommunications system, such as Tymshare, Inc., is needed for access to a remotely located computer.

This alternative should require more calendar years and programming time to develop than the others. While some applicable software could be modified, emphasis should be placed on contracting for programmers with library-related experience. An estimated 3-person years would be needed to develop this system using experienced contractors. Contract personnel charges are estimated at $50,000, based on a salary of $25,000 and overhead of $25,000 per year. Use of a computer system for 4,000 terminal hours for development and file-building will cost $25.00 per hour.

Estimated costs are:

| | | |
|---|---|---|
| 1. | Hardware and systems | $100,000 |
| 2. | Software (no estimate is given, as personnel costs would reflect software if used) | -0- |
| 3. | Personnel | 150,000 |
| | Total cost | $250,000 |

Operation of this system would be expensive due to the file-building needs of DBPH. The charges for accessing a MARC file commercially are:

| | |
|---|---|
| For a normal MARC record transaction | $1.25 per title for a set of cards and a holding record on magnetic tape. |
| Output for a MARC record (First time through the system) | .50 per title for output on microfiche only, no duplicates |
| Output for a MARC record (Second and subsequent times through the system) | .10 per title for output on microfiche |

An average of 4,000 additional terminal hours per year would be required to adapt the system to DBPH requirements. The cost of a system with an average growth rate of 17,000 titles per year would be:

|  |  |  |
|---|---|---|
| 1. | Searching MARC at $1.25 per title | $21,250 |
| 2. | 1,700 terminal hours per year | 42,500 |
| 3. | Terminal leases | 10,000 |
|  | Total cost | $73,750 |

### 5.4.4 DBPH Computer Facility

A minicomputer system located at DBPH may be considered as another possible alternative.

Advantages:

1. DBPH would have total in-house control of the project, including personnel, equipment, etc.
2. Available software packages could be used and/or modified to meet DBPH requirements, or new software could be developed with comparative ease, taking an acceptable similar system as a model.
3. Peripherals and additional core memory can be added as needed.
4. The hardware could be leased initially with an option to buy.
5. An in-house system would free DBPH from dependence on a shared processor like the one at ISO.
6. Maintenance costs would be lower than with other alternatives.

Disadvantages:

1. Development, hardware, software, and personnel costs would be high. This fact, and the necessity of rewriting all software, would probably add a year to development of a suitable operational system. In addition some tasks on the 3-year plan would have to be deferred or eliminated.
2. It would be necessary either to contract for program and operations support or to create new positions at DBPH.
3. Although equipment could be leased, it could rapidly become obsolete as DBPH requirements evolve. This problem could become critical:

5.4.4 continued

changes could easily affect the configuration, and reprogramming would be necessary.

Illustration:

Software costs will be very expensive since all programming efforts will have to be contracted out. No support for a minicomputer system exists in ISO, and none of the previous software developed by ISO is transferable. Current costs for contracting programmers able to work on a minicomputer system average $50,000 per person-year. This assumes a salary of $25,000, and overhead of $25,000. A 4-person-year effort should be necessary to develop the appropriate software.

Estimated costs are:

| | | |
|---|---|---|
| 1. | Hardware and systems | $127,800 |
| 2. | Software | 25,000 |
| 3. | Personnel | 200,000 |
| | Total cost | $352,800 |

Some savings might be realized with this alternative if software can be obtained from some operational library system. To date several systems are being developed but little is known about their operational characteristics. Some of these systems may be beneficial to DBPH after their programming is complete and debugged. Consequently the above estimates might be dramatically scaled down.

Current DBPH personnel could be used to operate the system, thus saving considerable operating expenses. However, a stand-alone minicomputer system requires an extensive maintenance procedure to reduce the chances of possible hardware failure. The cost for such a program is slightly less than 10 percent of its purchase price ($12,000 per year) for the proposed computer system. Another ongoing expense would be program support to correct errors or to add system improvements. For this system a mid-level programmer could be contracted for a short period at $3,000 per month from a minicomputer manufacturer such as the Digital Equipment Corporation. The operational expenses for this system would be: be:

| | | |
|---|---|---|
| 1. | Hardware maintenance | $12,000 |
| 2. | Programming support<br>(2 person-months) | 6,000 |
| | Total cost per year | $18,000 |

## 5.5 RECOMMENDED APPROACH AND JUSTIFICATION

Table V-D summarizes the development time, hardware and software costs, and total operational cost for each alternative. It is recommended that DBPH select ISO to develop their bibliographic system, for the following reasons:

a) ISO operates a system that meets many of the division's requirements; thus, a development effort at ISO would require enhancement and modification rather than completely new programming.

b) ISO is cognizant of DBPH operations, plans, and bibliographic requirements. This knowledge should save one calendar year in implementation time.

c) ISO has extensive experience in text processing and in using a MARC formatted data base.

d) DBPH would profit directly from any ISO development in other LC operating units.

e) DBPH can use the CDS Videocomp to produce camera-ready masters. ISO is familiar with and has produced output for this machine.

f) Costs for development, implementation, and operation at ISO should be less than with any other alternatives.

g) System design and implementation specified in the 3-year plan can be completed on schedule.

However, ISO cannot be chosen as the acceptable alternative until certain disadvantages are remedied. To facilitate this, it is recommended that the Library of Congress administration, through ISO:

a) provide DBPH with a written commitment to develop, implement, and operate the DBPH system within the time constraints specified; and

b) physically locate any ISO staff assigned to the project at DBPH in order to insure continuity and close interaction with the appropriate DBPH staff.

## 5.6 SYSTEM REQUIREMENTS

The DBPH bibliographic control system is a transaction-based information storage and retrieval system. The information involved should include everything pertaining to

| Alternative | Implementation Schedule | Hardware Costs | Software Costs | Personnel Costs | TOTAL DEVELOPMENT COSTS | Hardware Operational Costs | Software Operational Costs | TOTAL OPERATIONAL COSTS |
|---|---|---|---|---|---|---|---|---|
| 1. ISO | 1 year | $ 24,000 | $ -0- | $ 62,500 | $ 86,500 | $40,000 | $ -0- | $40,000 |
| 2. Government Facility | 2.5 years | 80,000 | 70,000 | 100,000 | 250,000 | 27,000 | 18,000 | 45,000 |
| 3. Commercial Facility | 3 years | 100,000 | -0- | 150,000 | 250,000 | 52,500 | 21,250 | 73,750 |
| 4. Minicomputer at DBPH | 3 years | 127,800 | 25,000 | 200,000 | 352,800 | 12,000 | 6,000 | 18,000 |

TABLE V-D

SUMMARY OF ALTERNATIVES AND COST

5.6 continued

title selection, conversion, and availability. The primary products of the system will be a Union Catalog, including titles produced for the blind and physically handicapped and an In-process file containing information on titles not yet completed. The Union Catalog should contain records of all DBPH mass and limited production titles, network titles, and affiliated agency titles. The location of each title will be indicated in order to facilitate optimum utilization of resources. Further enhancement of this system may also be achieved through use of the operational Braille Computer System.

The required DBPH system should have, at a minimum, the following features and capabilities:

a) Adherence to production and maintenance requirements of the Union Catalog to permit production of the entire catalog and supplements on schedule or on demand.

b) Space for 10,000 tracks of IBM-type discs, or their equivalent.

c) Display and hard-copy terminal access with a response time of 5 seconds or less, available during a normal 8-hour work day.

d) A modular system permitting use of each module as it becomes operational and allowing additions or enhancements at a later date.

e) Access control capability to prevent unauthorized access to the system data files.

f) A system in two operational modes: tutorial, for new or inexperienced users, and abbreviated, for experienced users, including MARC worksheet-like display panels with text-editing features for entering bibliographic data.

g) A user facility with total processing capability, including immediate update and corrected record call-back triggered by a single command or a series of commands when all necessary parameters are given.

h) Capability to produce a complete title profile, including all relevant past and current information, triggered by a single command. Access to functional information, such as book-title status should also be gained through a single command.

i) Capability to queue requests for production off-line. This feature is designed to process management reports with a view to adjusting

5.6 continued

production to user needs. To minimize unnecessary delays, this capability should be as free of human intervention as possible.

Figure V-1 gives a composite view of all functions defined so far under each subsystem. They can be carried out using the ISO computer facility (IBM 370) controlled by the CICS/OS operating system. Appendix E lists, by function, the specific elements that are to be entered or retrieved. Additional data elements and system features may be defined as implementation progresses.

## 5.7 IMPLEMENTATION PLAN

A detailed system design should be completed early in fiscal year 1976. It should delineate various system operations as they relate to bibliographic functions and should include file designs sufficiently complete to support transmission of a minimum of information under each function. In preparing this design, consideration should be given to existing capabilities so as to minimize software development without sacrificing system integrity.

In designing the system, the following steps should be followed:

Task A - Define functions, including man-machine interactions

Task B - Control functions

1) Define type of transactions
2) Establish data elements required to carry functions
3) Develop hierarchy of functions
4) Consider existing capabilities for incorporation

Task C - Define products

1) Determine products of each function
2) Define required management information
3) Define system products

Task D - Define system requirements

1) Determine volume of transactions
2) Define storage space requirements
3) Design special forms
4) Determine operating constraints

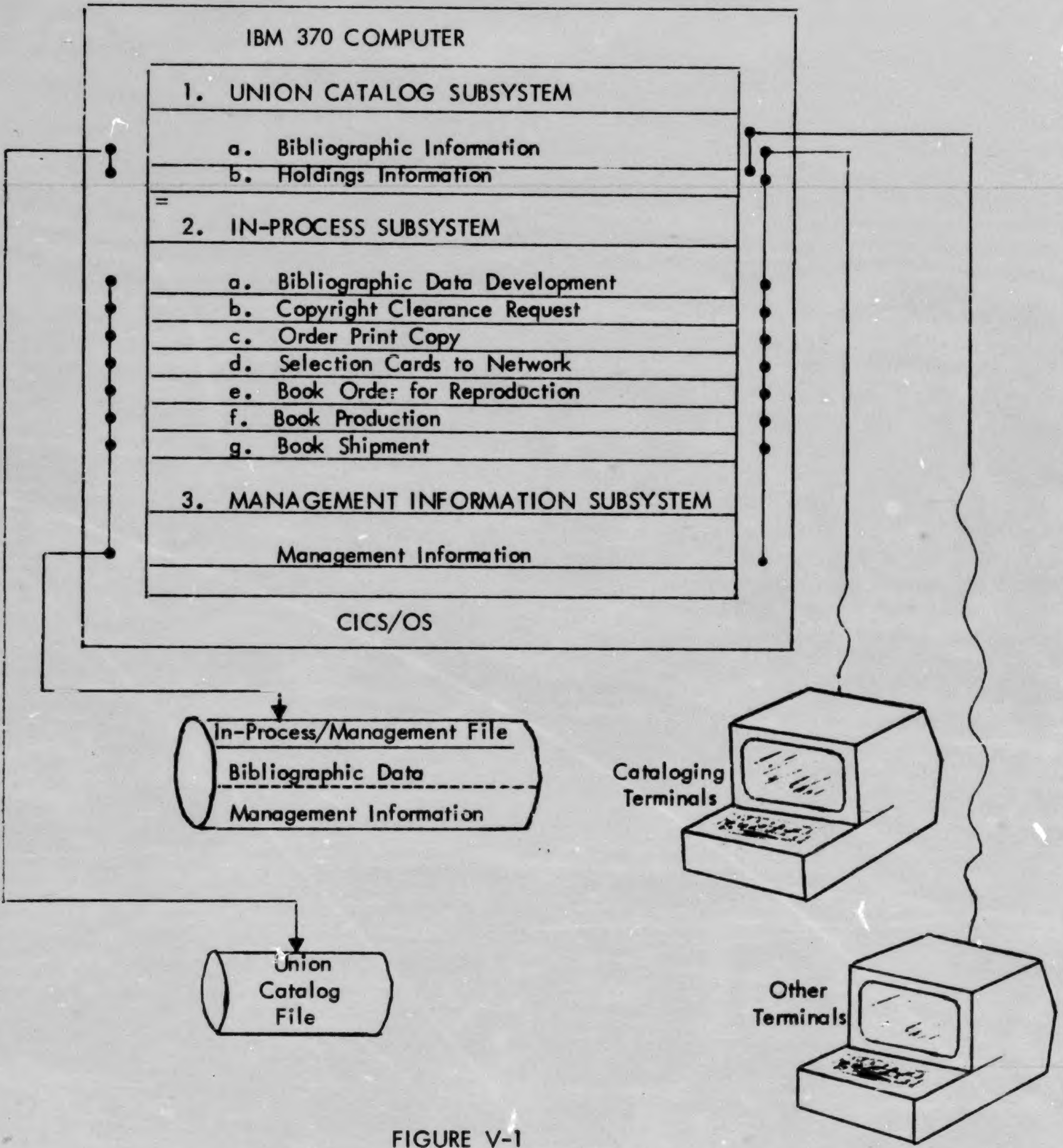

IBM 370 COMPUTER
1. UNION CATALOG SUBSYSTEM
a. Bibliographic Information
b. Holdings Information
2. IN-PROCESS SUBSYSTEM
a. Bibliographic Data Development
b. Copyright Clearance Request
c. Order Print Copy
d. Selection Cards to Network
e. Book Order for Reproduction
f. Book Production
g. Book Shipment
3. MANAGEMENT INFORMATION SUBSYSTEM
Management Information
CICS/OS
In-Process/Management File
Bibliographic Data
Management Information
Union Catalog File
Cataloging Terminals
Other Terminals

FIGURE V-1

5.7 continued

The Union Catalog and associated production activities have been defined and discussed in this report. Consequently, specific milestones, associated tasks, and target dates can be established. They are as follows:

| | Milestone | Target Date |
|---|---|---|
| 1. | Upgrade and convert titles cataloged since July 1974 (2,000). | December 1975 |
| | a. Complete conversion worksheets. | |
| | b. Award conversion contract. | |
| | c. Edit record. | |
| | d. Merge with mass produced titles. | |
| 2. | Produce working document in hardcopy with full bibliographic information for 12,000 mass produced titles. | December 1975 |
| | a. Complete conversion worksheets. | |
| | b. Award conversion contract. | |
| | c. Edit records. | |
| | d. Create print master. | |
| | e. Produce and distribute print copy. | |
| | f. Establish machine readable authority files. | |
| 3. | Produce working document in hardcopy with full bibliographic information for 25,000 limited production titles. | July 1976 |
| | a. Complete conversion worksheets. | |
| | b. Award conversion contract. | |
| | c. Edit records. | |
| | d. Create print record. | |
| | e. Produce and distribute print copy. | |
| | f. Merge with mass produced titles. | |
| 4. | Implementation of the in-process subsystem. | |
| | a. Analyze existing capabilities in terms of DBPH requirements (hardware and software). | August 1976 |
| | b. Prepare requests for proposal, if required. | |
| | c. Develop, test, and debug modified software. | |

5.7 continued

| Milestone | Target Date |
|---|---|
| d. Install hardware and related equipment. | |
| e. Test reports and other outputs. | |
| f. Establish DBPH internal procedures. | |
| g. Train DBPH personnel. | |
| h. Documentation. | |
| 5. Collect holdings information for mass and limited production titles and titles unique to the network libraries. | July 1975 |
| a. Develop reporting procedures and forms. | |
| b. Collect and edit holdings information. | |
| c. Convert holdings information. | |
| d. Merge bibliographic and holdings information. | |
| e. Create print master. | |
| f. Produce and distribute print copy. | |
| g. Add holdings of affiliated agencies. | |
| h. Develop reporting procedures and forms, if required. | |
| i. Convert to internal processing format. | |

# APPENDIX A

## PROCEDURAL FLOWS FOR PRESENT DBPH OPERATION

The following pages contain detailed work flow diagrams for DBPH functions. The study of these flows permits a determination of applications to be automated. The relevant areas as far as this system study is concerned are the library functions (pre-cataloging, cataloging, and post cataloging). Work flows have been created for all of these areas having identifiable procedures. Functions 11, 15, 16, 17, 18, 19 and 22 do not lend themselves to being flowed. They either use information gathered in the performance of other functions or have no impact on this study.

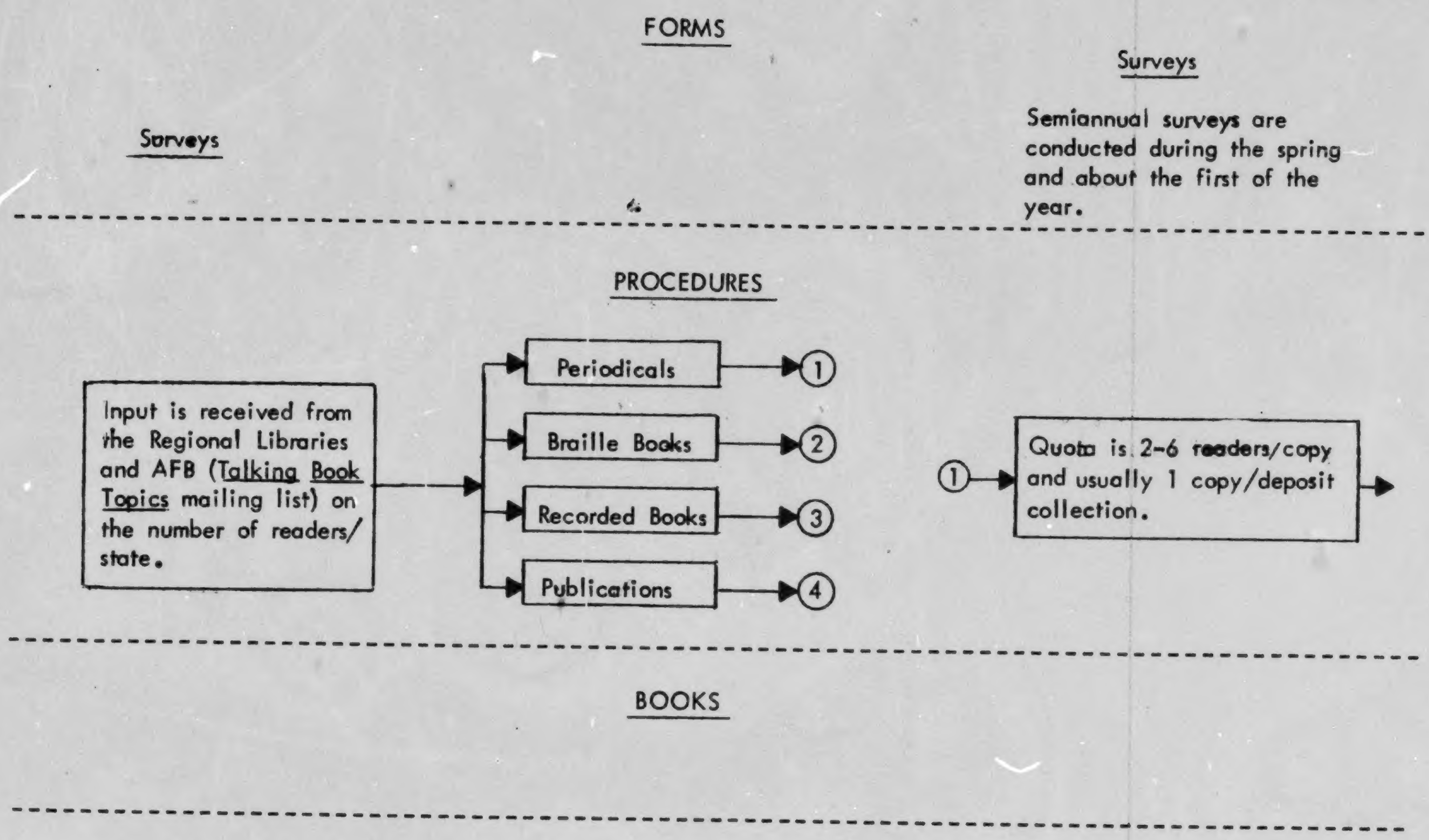

FORMS
Surveys
Surveys
Semiannual surveys are conducted during the spring and about the first of the year.
PROCEDURES
Input is received from the Regional Libraries and AFB (Talking Book Topics mailing list) on the number of readers/state.
Periodicals
Braille Books
Recorded Books
Publications
①
②
③
④
①
Quota is 2-6 readers/copy and usually 1 copy/deposit collection.
BOOKS

FIGURE A-1

QUOTA DETERMINATION -I

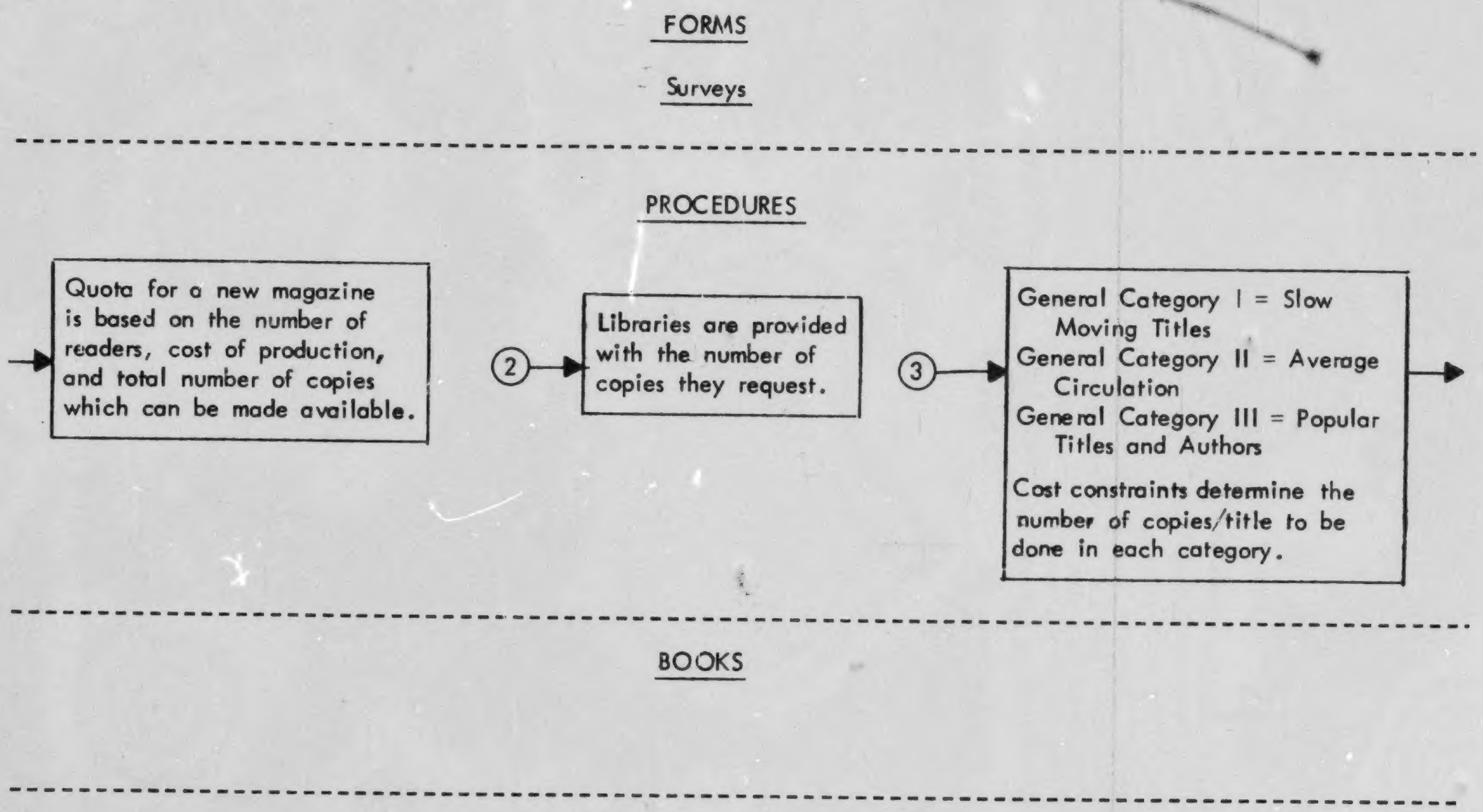
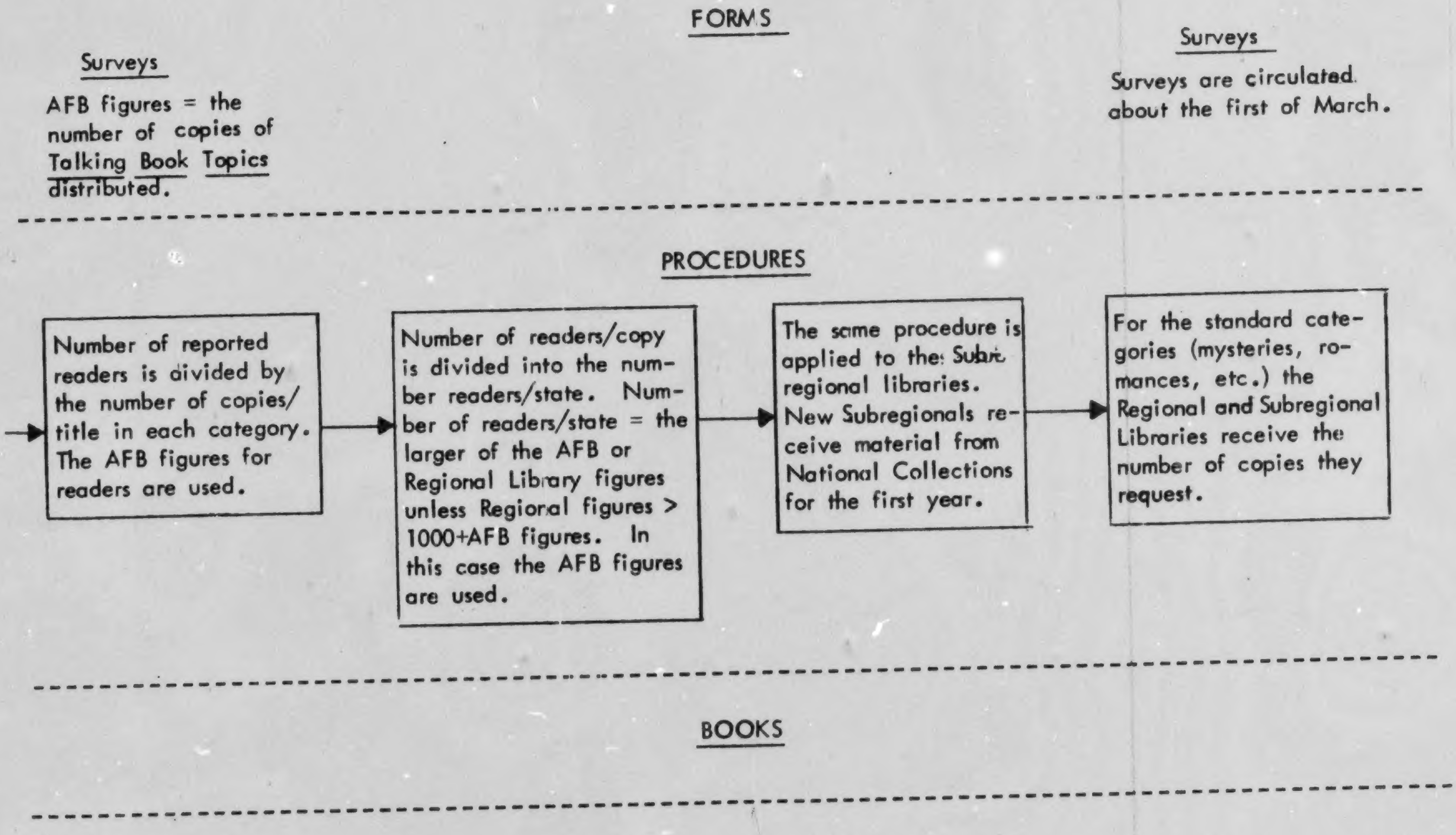

FORMS
Surveys
PROCEDURES
Quota for a new magazine is based on the number of readers, cost of production, and total number of copies which can be made available.
②
Libraries are provided with the number of copies they request.
③
General Category I = Slow Moving Titles
General Category II = Average Circulation
General Category III = Popular Titles and Authors
Cost constraints determine the number of copies/title to be done in each category.
BOOKS

FIGURE A-1 (cont'd)

QUOTA DETERMINATION - II



Surveys

AFB figures = the number of copies of Talking Book Topics distributed.

Surveys

Surveys are circulated about the first of March.

Number of reported readers is divided by the number of copies/title in each category. The AFB figures for readers are used.

Number of readers/copy is divided into the number readers/state. Number of readers/state = the larger of the AFB or Regional Library figures unless Regional figures > 1000+AFB figures. In this case the AFB figures are used.

The same procedure is applied to the Subregional libraries. New Subregionals receive material from National Collections for the first year.

For the standard categories (mysteries, romances, etc.) the Regional and Subregional Libraries receive the number of copies they request.

FIGURE A-1 (cont'd)

QUOTA DETERMINATION - III

## FORMS

**Surveys**

Surveys are conducted annually and just prior to publication.

---

## PROCEDURES

④ Surveys are utilized to help determine the number of new readers and the number of copies needed for public relations purposes.

---

## BOOKS

---

FIGURE A-1 (cont'd)

QUOTA DETERMINATION - IV

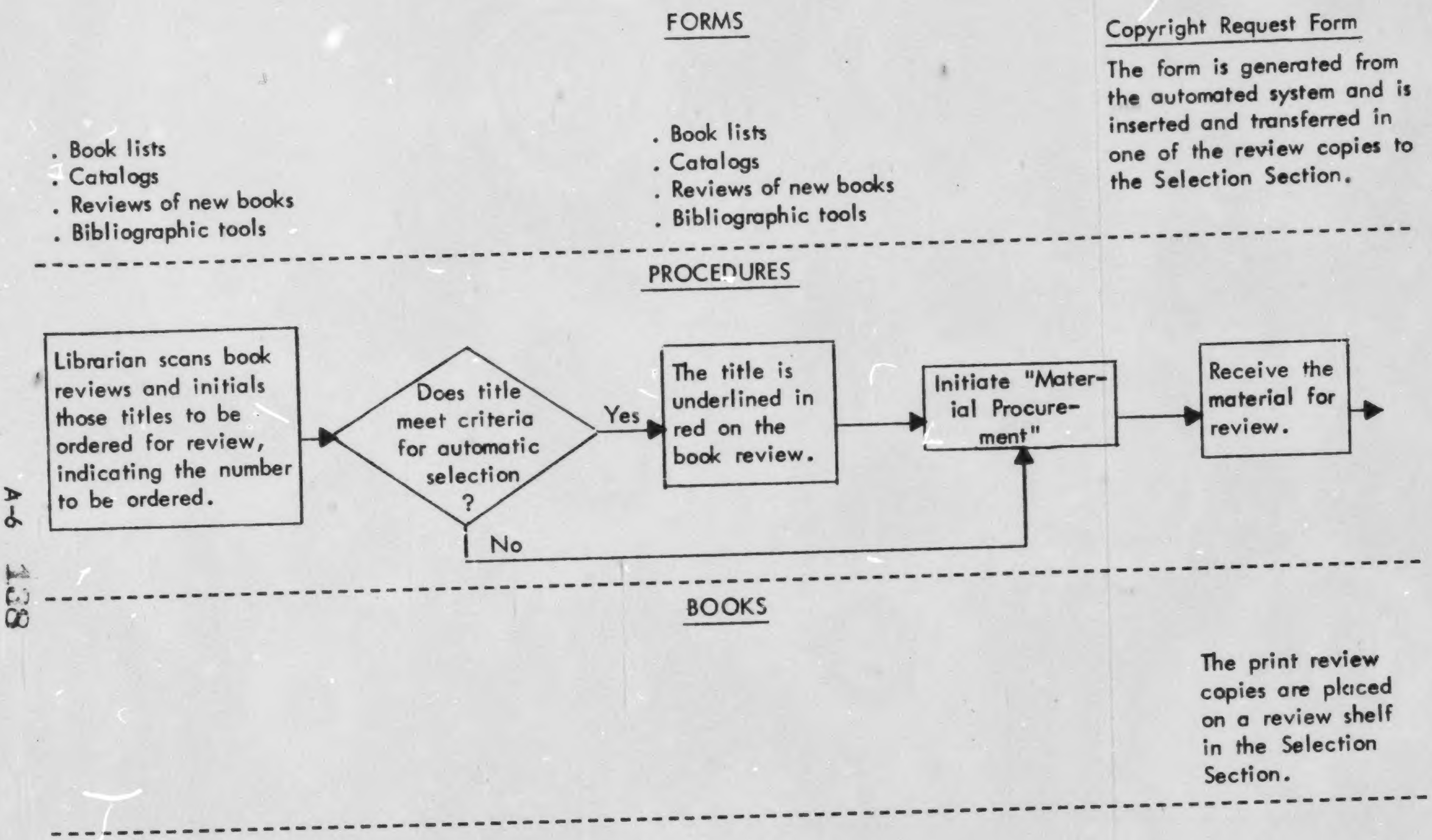

FORMS
Copyright Request Form
The form is generated from the automated system and is inserted and transferred in one of the review copies to the Selection Section.
. Book lists
. Catalogs
. Reviews of new books
. Bibliographic tools
. Book lists
. Catalogs
. Reviews of new books
. Bibliographic tools
PROCEDURES
Librarian scans book reviews and initials those titles to be ordered for review, indicating the number to be ordered.
Does title meet criteria for automatic selection ?
Yes
No
The title is underlined in red on the book review.
Initiate "Material Procurement"
Receive the material for review.
BOOKS
The print review copies are placed on a review shelf in the Selection Section.

FIGURE A-2

SELECTION — 1

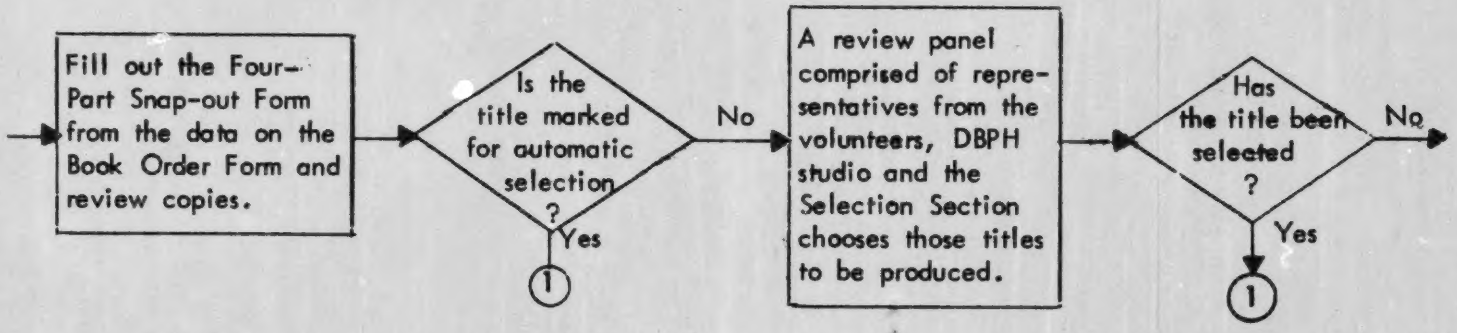
## FORMS

Four-Part Snap-Out

Data Elements:
Author, Title, Imprint,
Subject, and DBPH Production
Control Number.

The form is placed in
one of the review copies.

## PROCEDURES


Fill out the Four-Part Snap-out Form from the data on the Book Order Form and review copies.
Is the title marked for automatic selection ?
Yes
1
No
A review panel comprised of representatives from the volunteers, DBPH studio and the Selection Section chooses those titles to be produced.
Has the title been selected ?
Yes
1
No

## BOOKS

Books are pulled from, and then returned to, the review shelf to obtain information for the Four-Part Snap-Out Form.

Books are pulled from the review shelf for review.

FIGURE A-2 (cont'd)

SELECTION — II

## FORMS

**Four-Part Snap-Out (white)**

Filed in the in-process file with reasons for and date of cancellation. It replaces all other records for the title.

**Copyright Clearance Form**

Submitted to the Business Administration Section with reasons for and date of cancellation.

**Copyright Clearance Form**

Received from the Selection Section and notifies the terminal operator that the title has been rejected.

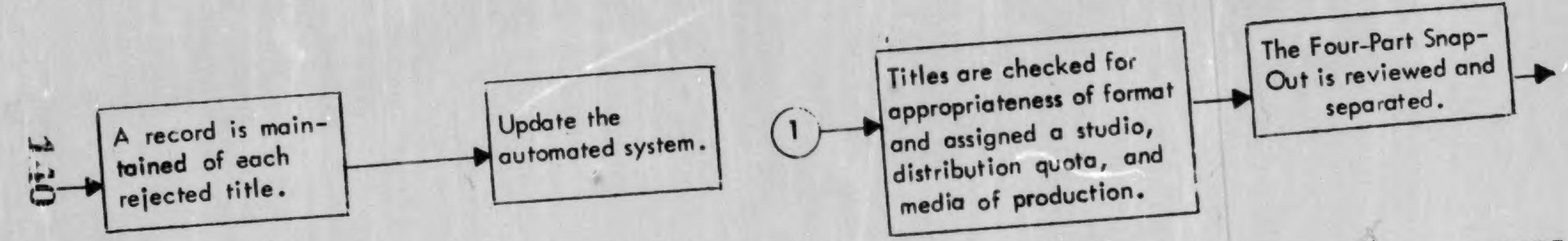
**Book Order Forms**

Pulled from the in-process file, checked for recommendations from the librarians, and then reinserted into the in-process file. The Four-Part Snap-Out is updated with the medium and studio for production, and some subject information.

**Four-Part Snap-Out**

Forwarded to the head of the Selection Section.

## PROCEDURES


A record is maintained of each rejected title.
Update the automated system.
1
Titles are checked for appropriateness of format and assigned a studio, distribution quota, and media of production.
The Four-Part Snap-Out is reviewed and separated.

## BOOKS

The review copies are sent to the Business Administration Section.

The review copies are returned to the book dealers if possible.

Books are forwarded to the head of the Selection Section.

FIGURE A-2 (cont'd)

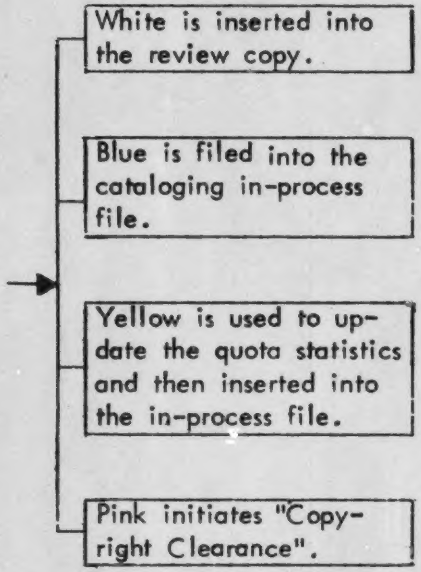
SELECTION — III

## FORMS

Four-Part Snap-Out
Copyright Clearance Form
This is sent with the pink copy of the Four-Part Snap-Out Form.

---

## PROCEDURE



White is inserted into the review copy.

Blue is filed into the cataloging in-process file.

Yellow is used to update the quota statistics and then inserted into the in-process file.

Pink initiates "Copyright Clearance".

---

## BOOKS

Books to annotation area
(initial description)

---

FIGURE A-2 (cont'd)

SELECTION — IV

The previous workflow charts depict the backbone operations of the "Selection" process. It does not, however, cover those cases where the process is initiated by a request from a patron or network library, the receipt of unsolicited material, submission of braille material by APH, and collection development.

At times, material requested of DBPH via Interlibrary Loan, cannot be located. In these cases book reviews are consulted. If the title is to be considered for the collection, print review copies are ordered and the "Selection" process continues. The person or organization from which the request originates is notified of the acceptance or rejection of the title. This same procedure is followed in the case of unsolicited material, but one less review copy is required.

APH is required under Federal Law (Sec. 105, Chapter 6, Title 20 of the U.S. Code) to deposit at DBPH, one copy of each title it produces. These braille books are reviewed and if considered appropriate, are added to the collection.

Periodically the staff of the Selection Section reviews the contents of the DBPH collection. When specific areas (e.g., mysteries, westerns, fairy tales, etc.) are considered deficient in the number of titles, a developmental effort is made to emphasize the selection of books in these areas.

FIGURE A-2 (cont'd)

SELECTION - V

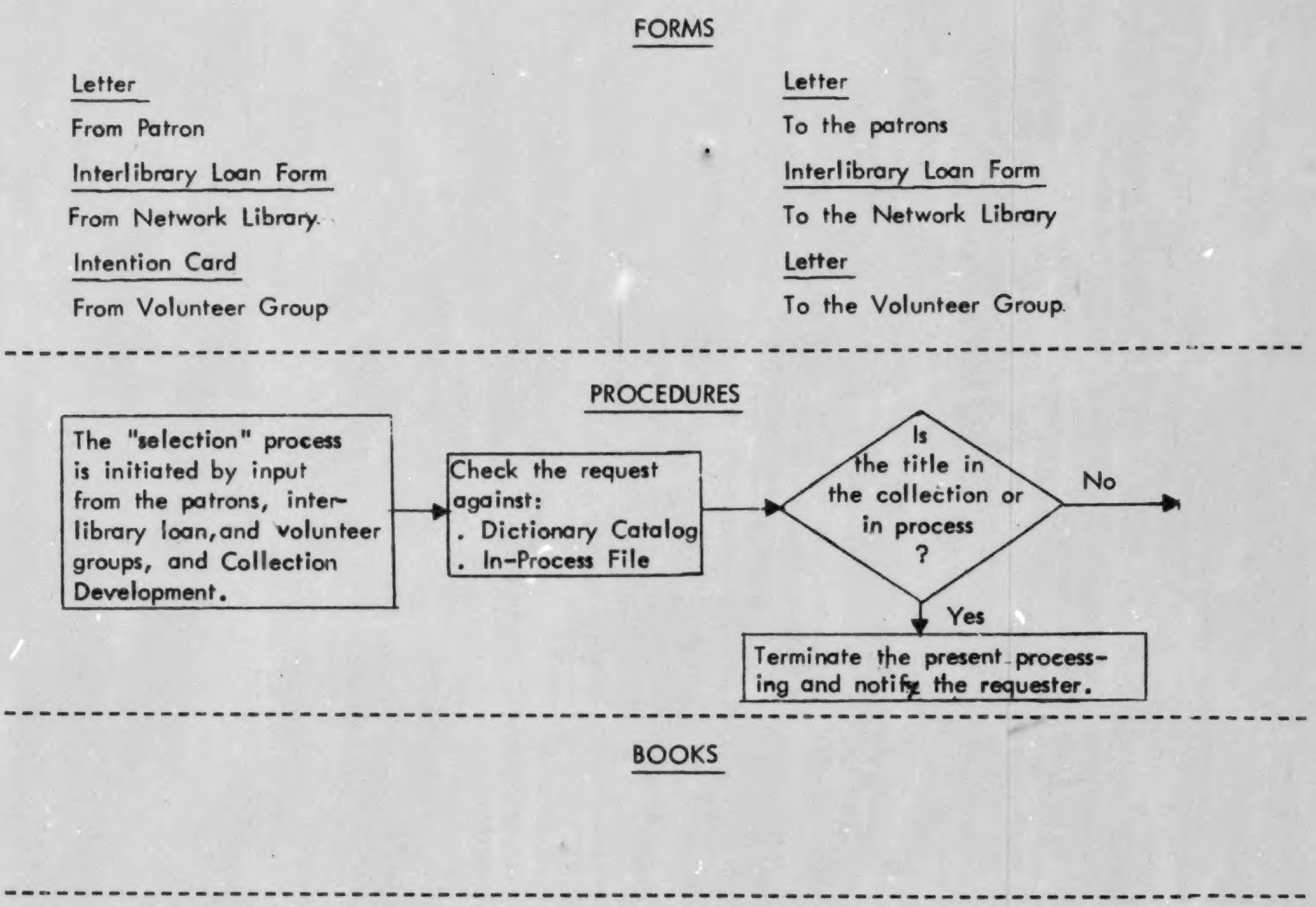

FORMS
Letter
From Patron
Interlibrary Loan Form
From Network Library
Intention Card
From Volunteer Group
Letter
To the patrons
Interlibrary Loan Form
To the Network Library
Letter
To the Volunteer Group
PROCEDURES
The "selection" process is initiated by input from the patrons, interlibrary loan, and volunteer groups, and Collection Development.
Check the request against:
. Dictionary Catalog
. In-Process File
Is the title in the collection or in process ?
No
Yes
Terminate the present processing and notify the requester.
BOOKS

FIGURE A-3

SELECTION (MUSIC) - I

## FORMS

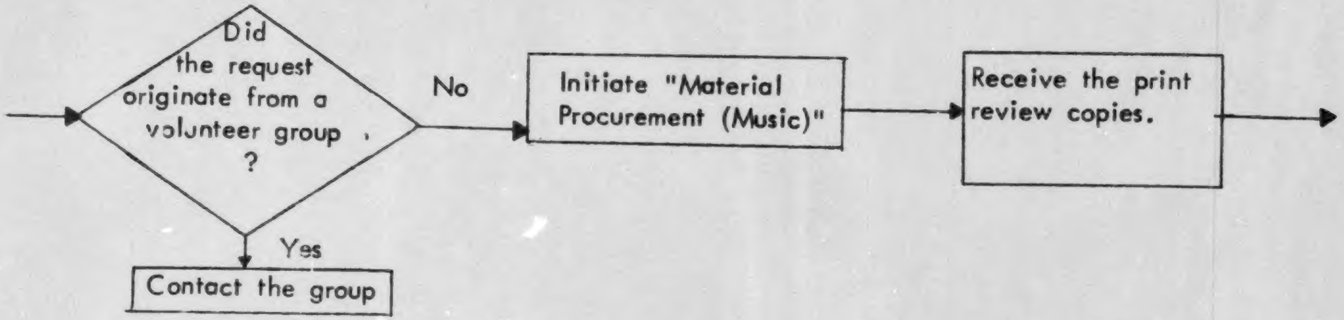
**Letter**

To the volunteer group notifying it that the title is not in the collection.

**Memo**

To the Business Administration Section.

## PROCEDURES


Did the request originate from a volunteer group ?
No
Yes
Contact the group
Initiate "Material Procurement (Music)"
Receive the print review copies.

## BOOKS

Review copies are received by the Music Section.

FIGURE A-3 (cont'd)

SELECTION (MUSIC) — II

## FORMS

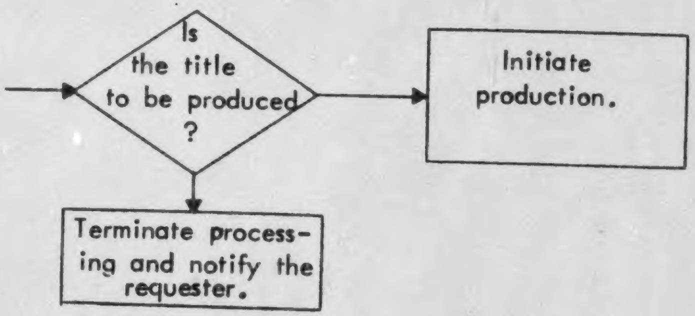
**Letter**

To the Patron

**Interlibrary Loan Form**

To the Network Library

## PROCEDURES


Is the title to be produced ?
Initiate production.
Terminate processing and notify the requester.

## BOOKS

FIGURE A-3 (cont'd)

SELECTION (MUSIC) - III

## FORMS

**Book Order Form (LC73-40(Rev 2/73))**

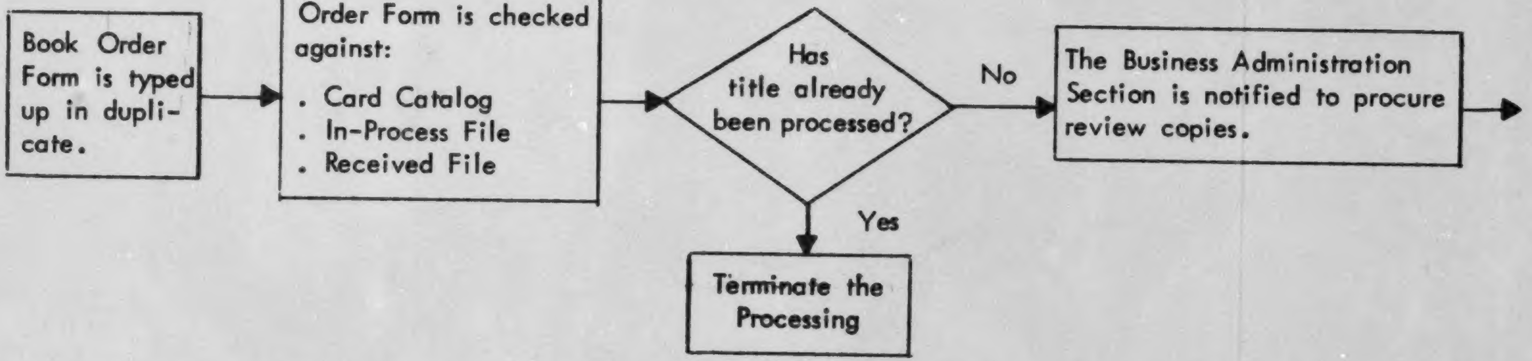
Data Elements:

Title, Author, Publisher, Date of Publication, LC Number, Source of Review, Originator of Recommendation, Number of Pages, Number of Copies Required, Cost, Dealer From Whom Book is to be Ordered, and Special Instructions.

**Book Order Form**

- The original is sent to the Business Administration Section.
- The copy is filed in the in-process file in the Selection Section.

## PROCEDURES


Book Order Form is typed up in duplicate.
Order Form is checked against:
. Card Catalog
. In-Process File
. Received File
Has title already been processed?
No
Yes
The Business Administration Section is notified to procure review copies.
Terminate the Processing

## BOOKS

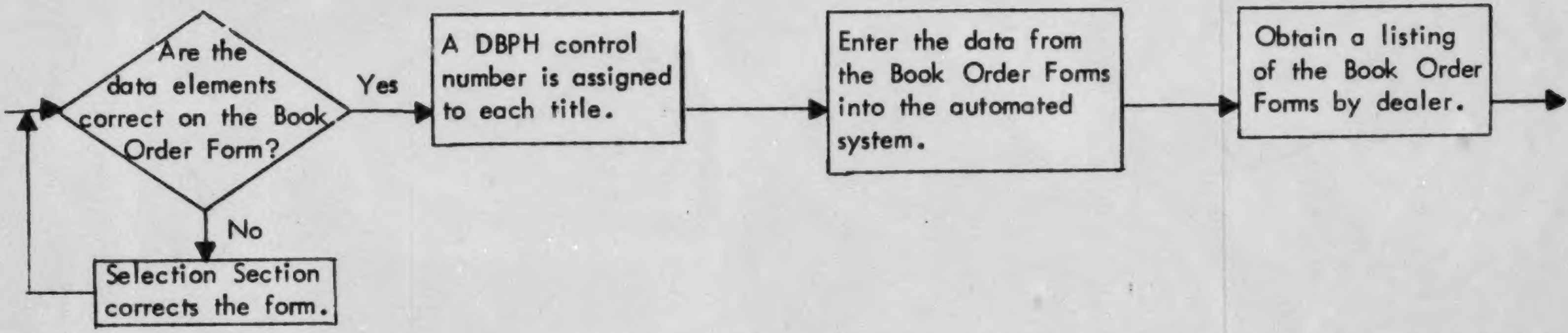
FIGURE A-4

MATERIAL PROCUREMENT - 1

## FORMS

| Book Order Form | Book Order Form (original) | Book Order Form (original) | Listing |
|---|---|---|---|
| The original copy is received and checked by the Business Administration Section. | The forms are batched by dealer and a control number is assigned to each title. | The data from this form is used to create a record in the automated system. | Printout of Book Order Forms from the automated system. |

## PROCEDURES


Are the data elements correct on the Book Order Form?
Yes
No
Selection Section corrects the form.
A DBPH control number is assigned to each title.
Enter the data from the Book Order Forms into the automated system.
Obtain a listing of the Book Order Forms by dealer.

## BOOKS

FIGURE A-4 (cont'd)

MATERIAL PROCUREMENT - II

FORMS

Listing

To dealer
Standard Form Letter
(For the blanket order)
To dealer

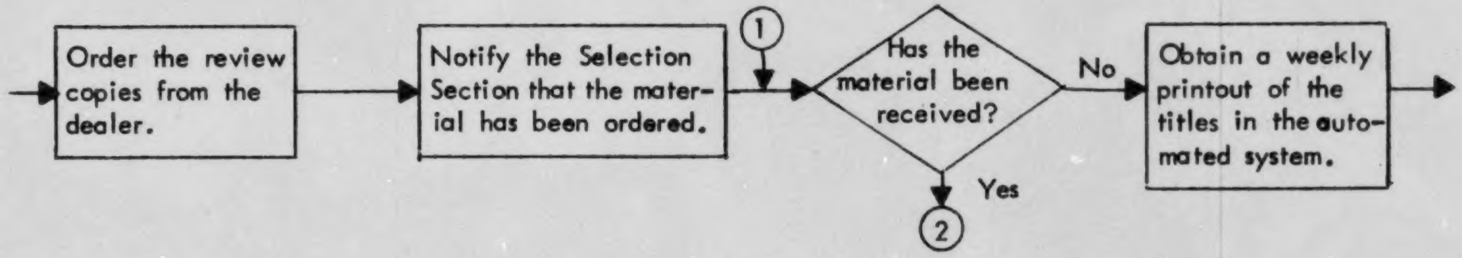
Book Order Form

Stamp the order date on the original copy and forward it to the Selection Section for inclusion in the in-process file.

Weekly Printout

Contains: Title, Author, Dealer, Date of Order, and Status Code.

PROCEDURES


Order the review copies from the dealer.
Notify the Selection Section that the material has been ordered.
①
Has the material been received?
No
Yes
②
Obtain a weekly printout of the titles in the automated system.

BOOKS

FIGURE A-4 (cont'd)

MATERIAL PROCUREMENT — III

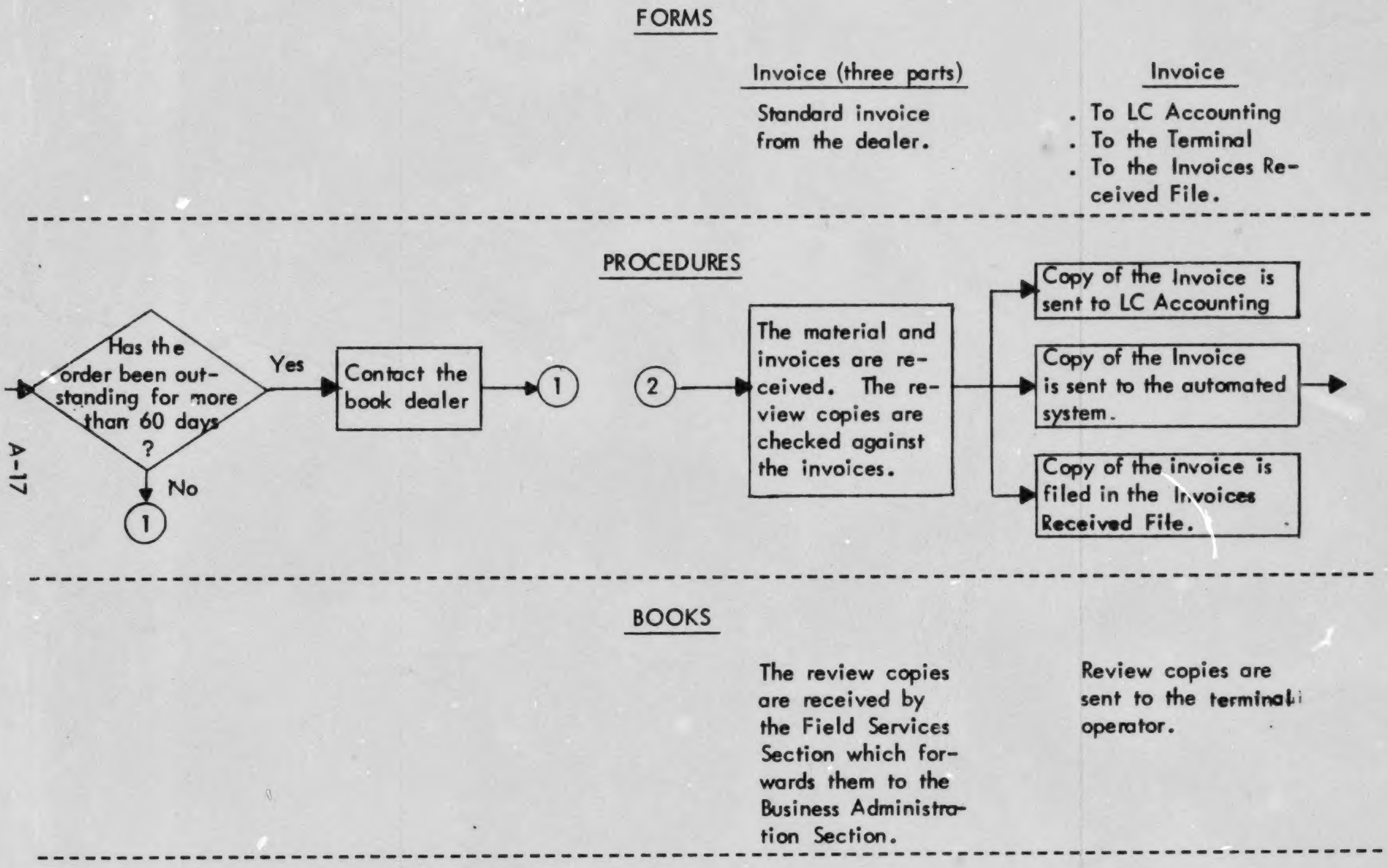

FORMS
Invoice (three parts)
Standard invoice from the dealer.
Invoice
. To LC Accounting
. To the Terminal
. To the Invoices Received File.
PROCEDURES
Has the order been outstanding for more than 60 days ?
Yes
No
Contact the book dealer
1
2
1
The material and invoices are received. The review copies are checked against the invoices.
Copy of the Invoice is sent to LC Accounting
Copy of the Invoice is sent to the automated system.
Copy of the invoice is filed in the Invoices Received File.
BOOKS
The review copies are received by the Field Services Section which forwards them to the Business Administration Section.
Review copies are sent to the terminal operator.

FIGURE A-4 (cont'd)

MATERIAL PROCUREMENT - IV

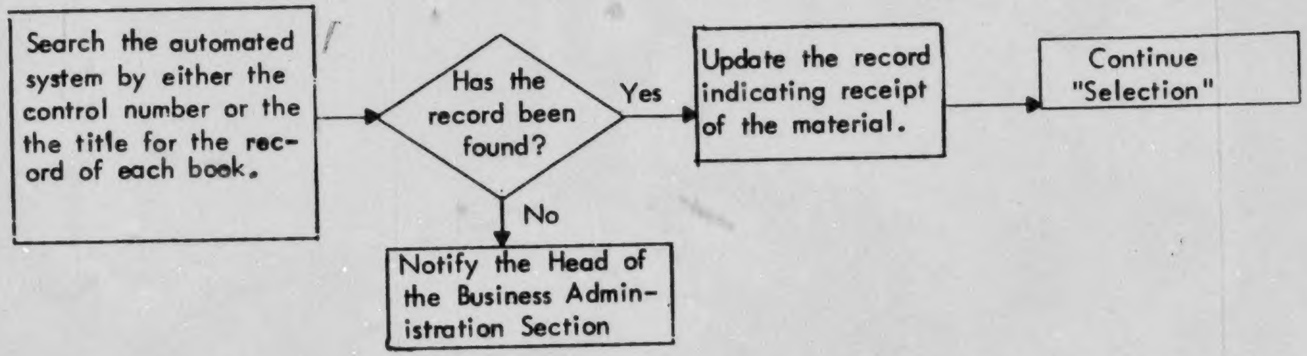
## FORMS

**Book Order Form**

Both copies are stamped with the date received.

. The original is placed in the Received File.
. The copy is placed in one of the review copies.

## PROCEDURES


Search the automated system by either the control number or the the title for the record of each book.
Has the record been found?
Yes
No
Update the record indicating receipt of the material.
Continue "Selection"
Notify the Head of the Business Administration Section

## BOOKS

The print review copies are forwarded to the Selection Section.

FIGURE A-4 (cont'd)

MATERIAL PROCUREMENT — V

The Music Section either submits a memo to the Business Administration Section to initiate the standard "Material Procurement" process or purchases the print review copies from book stores directly.

FIGURE A-4 (cont'd)

MATERIAL PROCUREMENT (MUSIC)

## FORMS

Copyright Clearance Form (73-102 (Rev 8/74))

The form is generated at the time the print review copies are received by the Business Administration Section and inserted into one of them.

Data Elements: Title, DBPH Control #, Author, Publisher, Publication Date, Edition, Copyright Statement, and Name of Copyright Holder.

Four Part Snap-Out (pink) and Copyright Clearance Form (73-102 (Rev 8/74))

Received from the Selection Section.

LC128 (white & yellow)

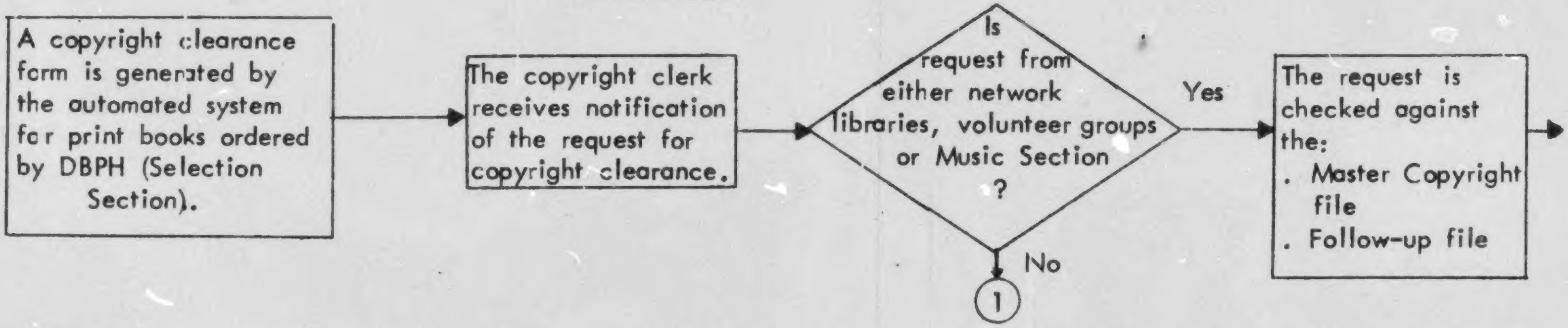
Received from the network libraries, and public and private groups.

3 x 5 Request Form

Received from the Music Section.

3 x 5 Request and LC128 (white & yellow)

## PROCEDURES


A copyright clearance form is generated by the automated system for print books ordered by DBPH (Selection Section).
The copyright clerk receives notification of the request for copyright clearance.
Is request from either network libraries, volunteer groups or Music Section ?
Yes
No
1
The request is checked against the:
. Master Copyright file
. Follow-up file

## BOOKS

The review copies are transferred from the Business Administration Section to the Selection Section.

FIGURE A-5

COPYRIGHT CLEARANCE — I

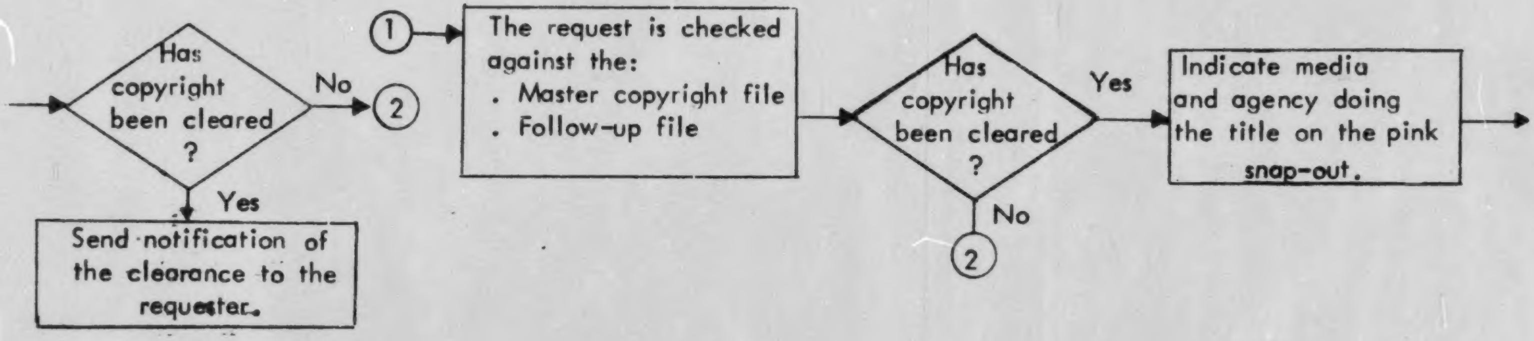
## FORMS

LC128 (white & yellow)
To the requester.
3 x 5 Request
To Music Section.

Four-Part Snap-out (pink) and
Copyright Request Form

Four-Part Snap-out (pink)

## PROCEDURES


Has copyright been cleared ?
No
2
Yes
Send notification of the clearance to the requester.
1
The request is checked against the:
. Master copyright file
. Follow-up file
Has copyright been cleared ?
Yes
No
2
Indicate media and agency doing the title on the pink snap-out.

## BOOKS

FIGURE A-5 (cont'd)

COPYRIGHT CLEARANCE — II

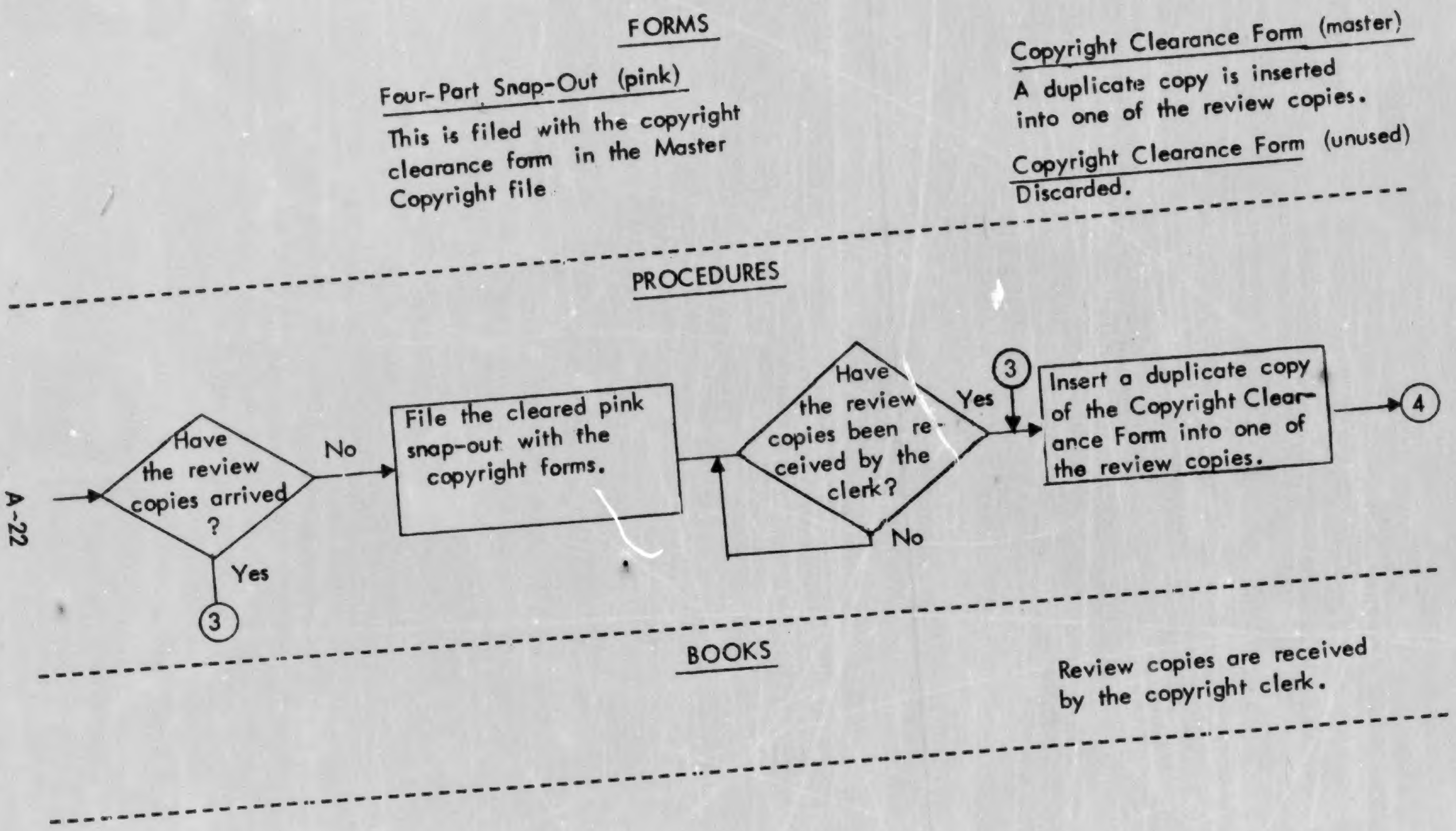

FORMS
Four-Part Snap-Out (pink)
This is filed with the copyright clearance form in the Master Copyright file
Copyright Clearance Form (master)
A duplicate copy is inserted into one of the review copies.
Copyright Clearance Form (unused)
Discarded.
PROCEDURES
Have the review copies arrived ?
No
Yes
3
File the cleared pink snap-out with the copyright forms.
Have the review copies been received by the clerk?
Yes
No
3
Insert a duplicate copy of the Copyright Clearance Form into one of the review copies.
4
BOOKS
Review copies are received by the copyright clerk.

FIGURE A-5 (cont'd)

COPYRIGHT CLEARANCE — III

## FORMS

**Copyright Clearance Form (white & blue)**

The white and blue portions are sent out to the holder(s) of the copyright. If there is more than one holder, or the request originated outside of DBPH or from the Music Section, extra forms are typed. (LC73-102 (Rev 8/73)).

**Copyright Clearance Form (pink)**

To the master copyright file.

**Cover Letter**

**Agency Request Letter**

**Copyright Clearance Form (white & blue)**

If there is more than one holder, or the request originated outside of DBPH or from the Music Section, extra forms are typed. (LC73-102(Rev 8/73)).

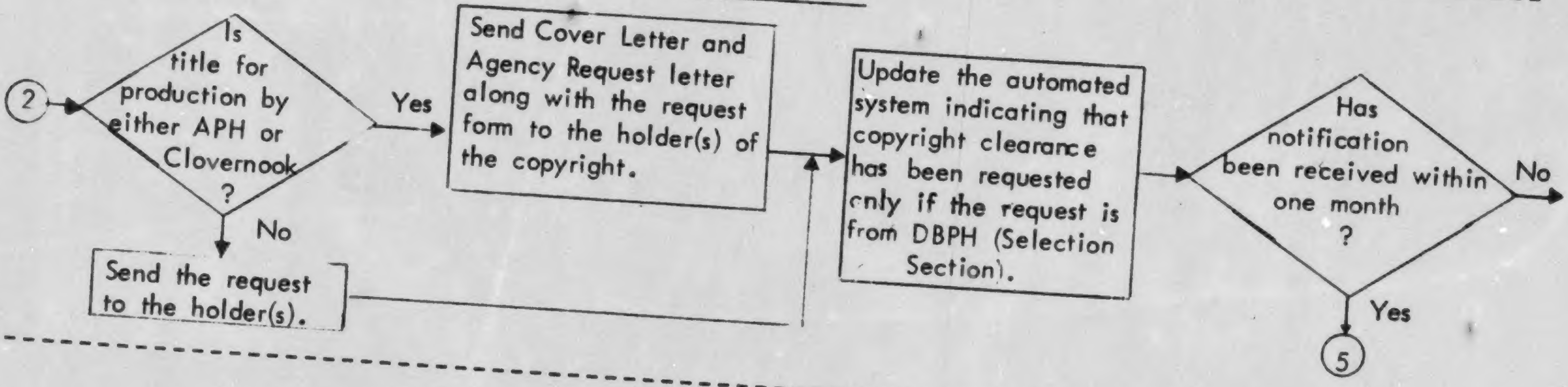
**Copyright Clearance Form (pink)**

To the master copyright file.

**Four-Part Snap-Out (pink)**

The form is sent to, and then returned from (filed in the follow-up file) the Business Administration Section, where the automated system is updated.

## PROCEDURES


2
Is title for production by either APH or Clovernook ?
Yes
No
Send Cover Letter and Agency Request letter along with the request form to the holder(s) of the copyright.
Send the request to the holder(s).
Update the automated system indicating that copyright clearance has been requested only if the request is from DBPH (Selection Section).
Has notification been received within one month ?
No
Yes
5

## BOOKS

FIGURE A-5 (cont'd)

COPYRIGHT CLEARANCE — IV

FORMS

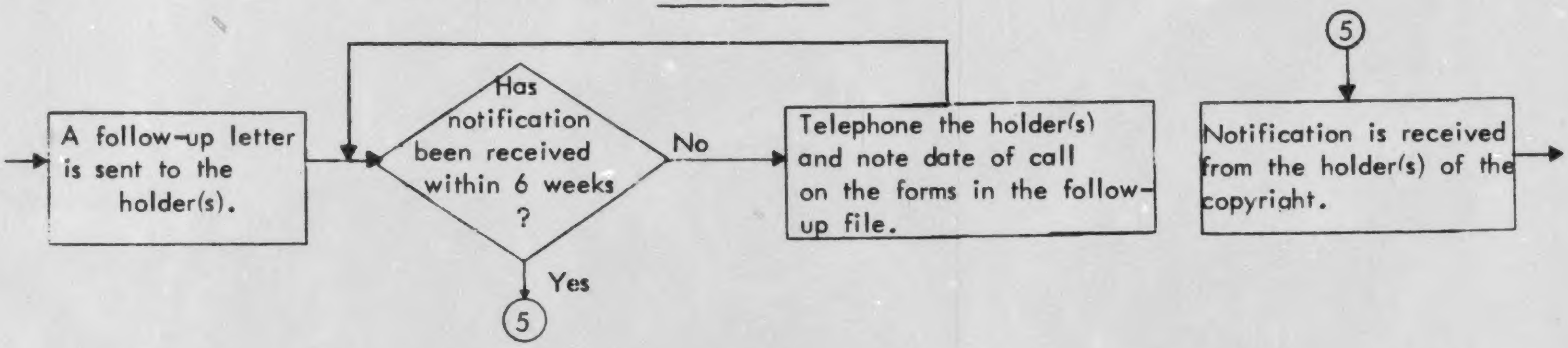
**Follow-up Letter**

The forms in the follow-up file are dated and initialed with the first letter notice.

**Copyright Clearance Form**

The holder(s) of the copyright return the white portion and retain the blue portion.

PROCEDURES


A follow-up letter is sent to the holder(s).
Has notification been received within 6 weeks ?
No
Yes
5
Telephone the holder(s) and note date of call on the forms in the follow-up file.
5
Notification is received from the holder(s) of the copyright.

BOOKS

FIGURE A-5 (cont'd)

COPYRIGHT CLEARANCE — V

FORMS

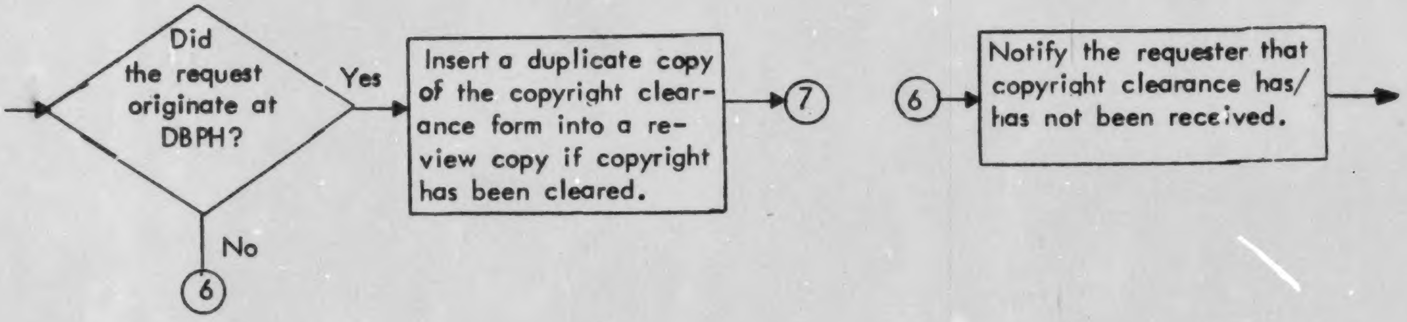
LC 128 (white and yellow)

To the Requester.

3 x 5 Request

To the Music Section.

PROCEDURES


Did the request originate at DBPH?
Yes
No
6
Insert a duplicate copy of the copyright clearance form into a review copy if copyright has been cleared.
7
6
Notify the requester that copyright clearance has/has not been received.

BOOKS

FIGURE A-5 (cont'd)

COPYRIGHT CLEARANCE — VI

## FORMS

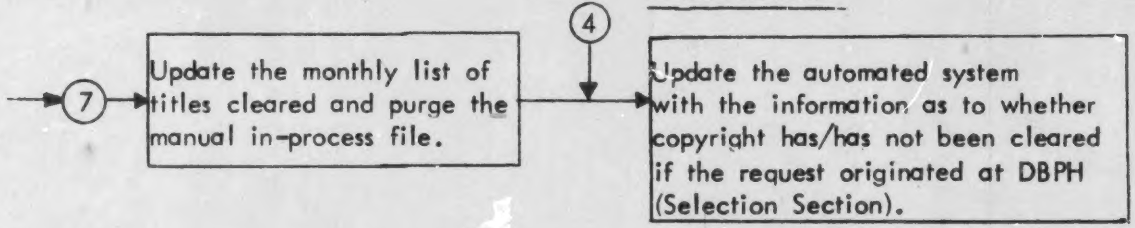
Copyright Clearance Form (white)
File in the Master Copyright File.
Copyright Clearance Form (pink)
File for quarterly list.

Four-Part Snap-Out (pink)
Used to update the automated system.

Four-Part Snap-Out (yellow)
Use to update the monthly list of titles and file it in the received file.
Book Order Form (copy)
Discard.

---

## PROCEDURES


7
Update the monthly list of titles cleared and purge the manual in-process file.
4
Update the automated system with the information as to whether copyright has/has not been cleared if the request originated at DBPH (Selection Section).

---

## BOOKS

Forward the review copies to Cataloging if the title has not been cancelled.

---

FIGURE A-5 (cont'd)

COPYRIGHT CLEARANCE — VII

The Music Section seeks permission for "Copyright Clearance" in a variety of ways. Prior to October, 1973, a request to obtain blanket copyright permission for large print books was sent directly to the publisher, from the section. Presently all requests are forwarded to the copyright clearance clerk in the Selection Section for braille, recorded, and large print titles.

Some material is acquired commercially or from volunteer groups. In these cases, the producer obtains the necessary copyright permission.

FIGURE A-5 (cont'd)

COPYRIGHT CLEARANCE (MUSIC)

## FORMS

Request for Price Quotation (two parts)

Data Elements: Heading (for Studio or Printing House) Distribution Code, Control Number, Author, Title, Publisher, Date of Publication, Special Instructions, and Suggested Related Titles with a Bibliography for Each.

Copyright Request Form (duplicate)

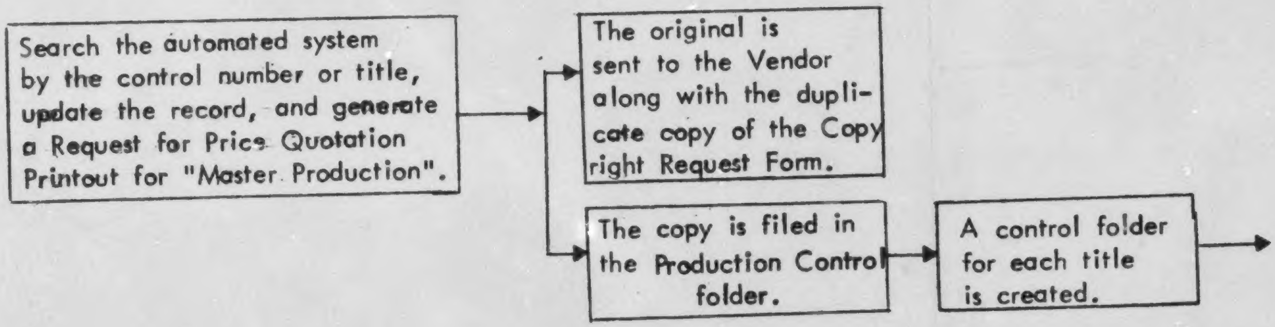
To the Vendor.

Production Control Folder

Data Elements: Control Number, Name of Vendor and Date Forwarded to the Vendor.

Contents: White Portion of the Four-Part Snap-Out Form and the Annotation Form (3 x 5).

## PROCEDURES



Search the automated system by the control number or title, update the record, and generate a Request for Price Quotation Printout for "Master Production".

The original is sent to the Vendor along with the duplicate copy of the Copyright Request Form.

The copy is filed in the Production Control folder.

A control folder for each title is created.

## BOOKS

The review copies are received by the terminal operator in the Business Administration Section from Cataloging.

Review copies are forwarded to the Field Services Section and sent to the Vendor.

FIGURE A-6

MASTER PRODUCTION — I

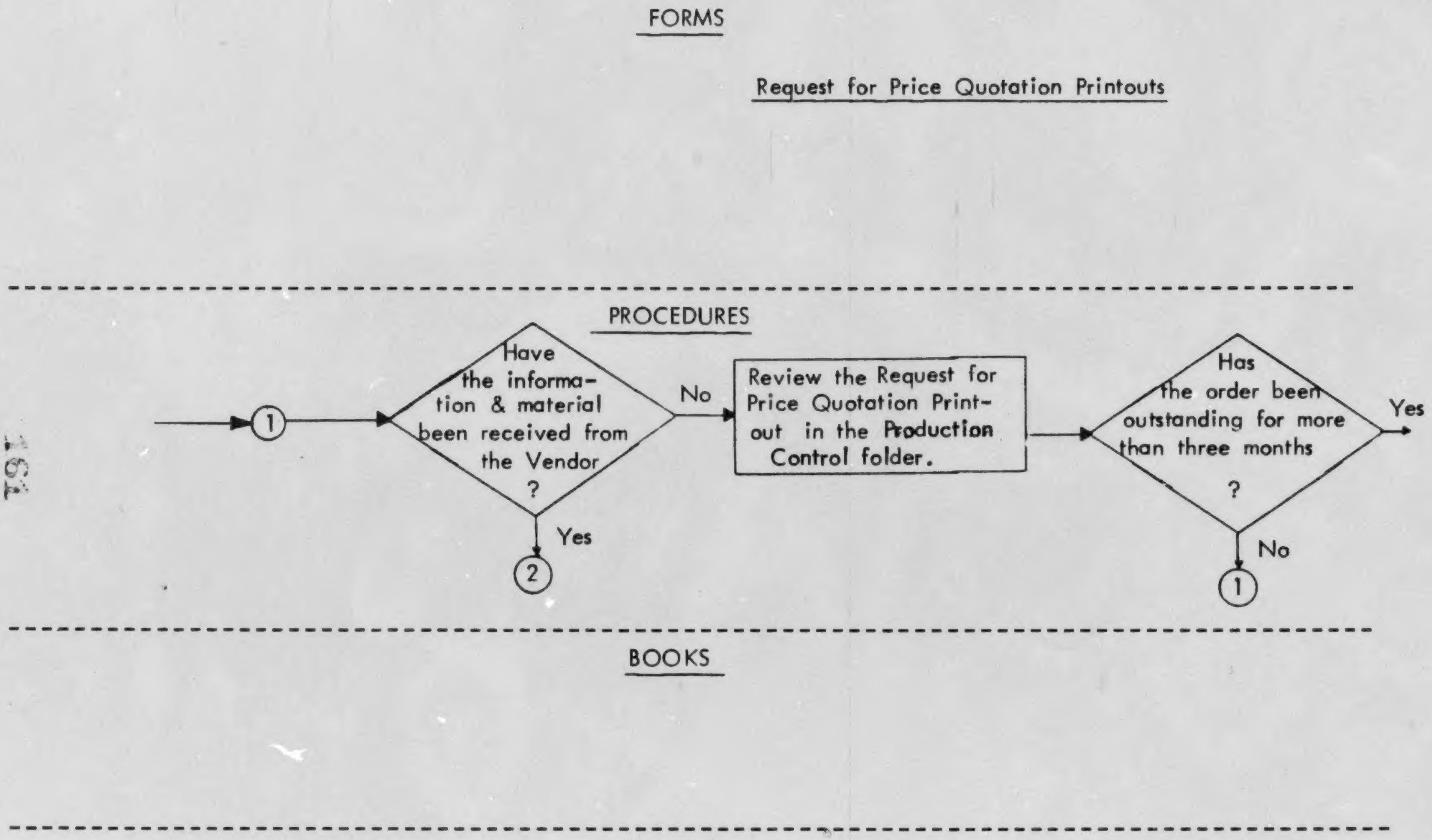

FORMS
Request for Price Quotation Printouts
PROCEDURES
1
Have the information & material been received from the Vendor ?
Yes
2
No
Review the Request for Price Quotation Printout in the Production Control folder.
Has the order been outstanding for more than three months ?
Yes
No
1
BOOKS

FIGURE A-6 (cont'd)

MASTER PRODUCTION — II

## FORMS

From the Vendor

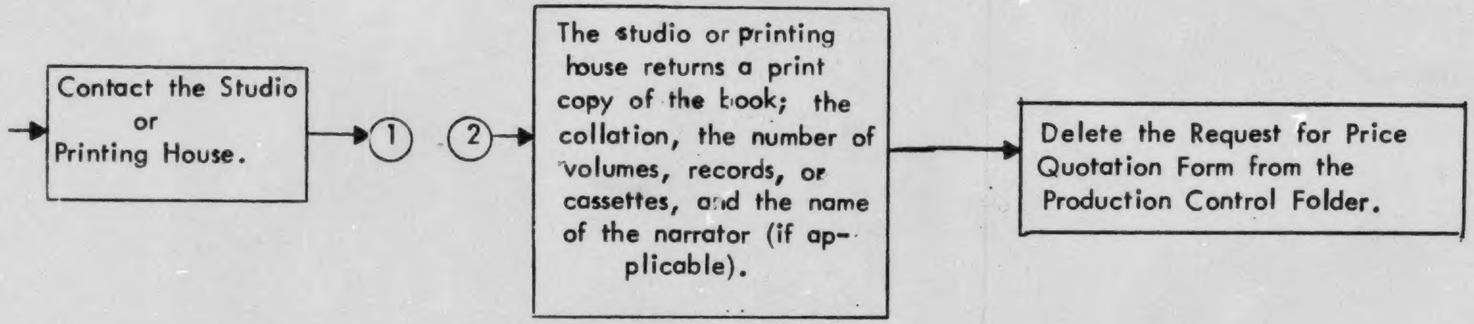
- Collation
- Number of Volumes, Records or Cassettes
- Name of Narrator (if applicable)

Request for Price Quotation

Discard

---

## PROCEDURES



Contact the Studio or Printing House.

The studio or printing house returns a print copy of the book; the collation, the number of volumes, records, or cassettes, and the name of the narrator (if applicable).

Delete the Request for Price Quotation Form from the Production Control Folder.

---

## BOOKS

A review copy is received by the Field Services Section from the Vendor and forwarded to the Business Administration Section.

---

FIGURE A-6 (cont'd)

MASTER PRODUCTION — III

## FORMS

**Volunteer Production Printout**

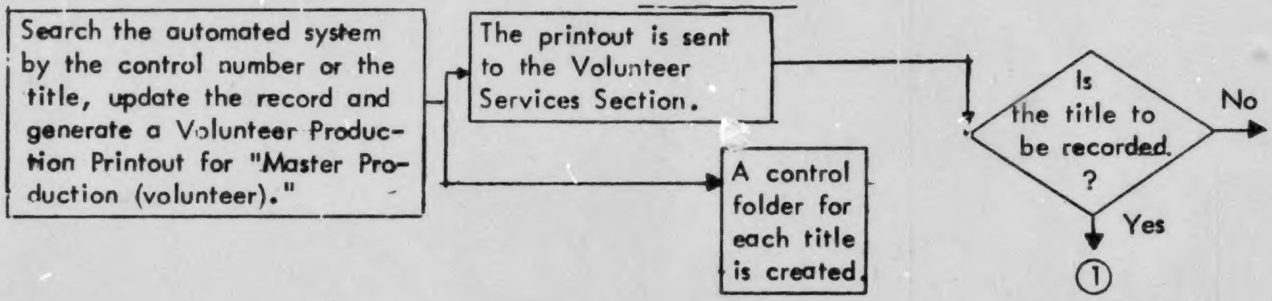
Data Elements: Heading (for Volunteer Services Section), Control Number, Author, Title, Publisher, Date of Publication, Special Instructions, and Suggested Related Titles with a Bibliography for Each.

**Production Control Folder**

Data Elements: Control Number, "Volunteer Production" Label, and Date forwarded to the Volunteer Services Section.

Contents: Four Part Snap-Out Form (white), Annotation Form (3 x 5) and Copyright Clearance Form (duplicate).

## PROCEDURES


Search the automated system by the control number or the title, update the record and generate a Volunteer Production Printout for "Master Production (volunteer)."
The printout is sent to the Volunteer Services Section.
A control folder for each title is created.
Is the title to be recorded. ?
No
Yes
①

## BOOKS

The review copies are received from cataloging by the terminal operator in the Business Administration Section.

The review copies are forwarded to the Volunteer Services Section.

FIGURE A-6 (cont'd)

MASTER PRODUCTION (VOLUNTEER) — I

## FORMS

**Authorization Invoice (five-part)**

Data elements: Author, Title, and Name and Address of the Braille Transcriber.

**3 x 5 Card (Control Card)**

Data elements: Name and Address of the Braille Transcriber, and/or Organization, Date the Material is sent out, Title and Author.

**Volunteer Production Printout**

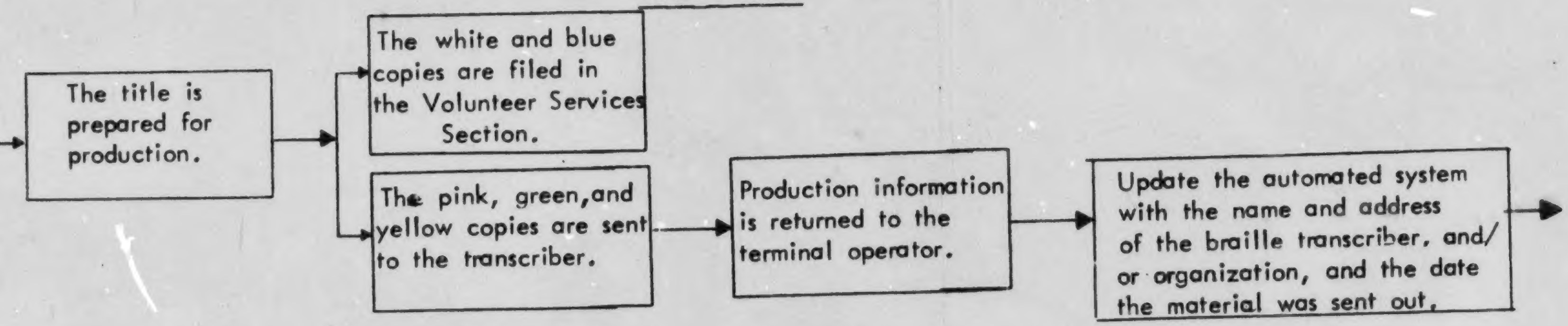
The name and address of the braille transcriber, and/or organization, and the date the material was sent out is added and the form is returned to the Business Administration Section.

**Volunteer Production Printout**

The new data is used to update the automated system.

**Authorization Invoice**

## PROCEDURES


The title is prepared for production.
The white and blue copies are filed in the Volunteer Services Section.
The pink, green, and yellow copies are sent to the transcriber.
Production information is returned to the terminal operator.
Update the automated system with the name and address of the braille transcriber, and/or organization, and the date the material was sent out.

## BOOKS

The print review copies are sent to the transcriber.

FIGURE A-6 (cont'd)

MASTER PRODUCTION (VOLUNTEER) — II

## FORMS

**Letter**

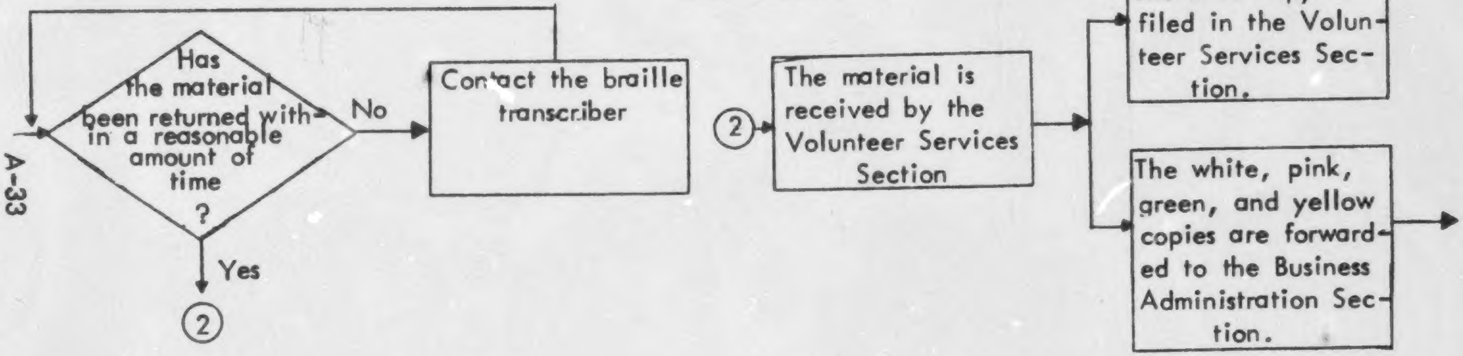
To the braille transcriber.

**Authorization Invoice**

Returned with the number of volumes of braille indicated on it by the transcriber.

---

## PROCEDURES


Has the material been returned within a reasonable amount of time ?
No
Yes
Contact the braille transcriber
②
The material is received by the Volunteer Services Section
The blue copy is filed in the Volunteer Services Section.
The white, pink, green, and yellow copies are forwarded to the Business Administration Section.

---

## BOOKS

One print review copy is returned along with the braille material to the Volunteer Services Section via the Field Services Section.

FIGURE A-6 (cont'd)

MASTER PRODUCTION (VOLUNTEER) — III

## FORMS

Authorization Invoice (five-part)

Data elements: Author, Title, and Name and Address of the Proofreader.

3 x 5 Card (Control Card)

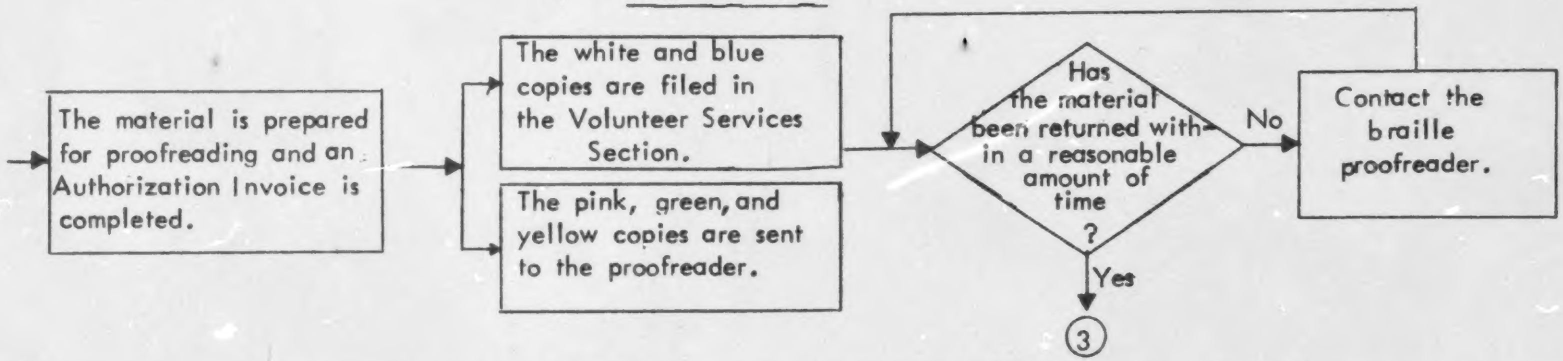
The name and address of the proof reader and/or organization, and the date sent are added to the card.

Authorization Invoice

To Volunteer Services Section - White and blue copies.

To Proofreader - Pink, green and yellow copies.

## PROCEDURES


The material is prepared for proofreading and an Authorization Invoice is completed.
The white and blue copies are filed in the Volunteer Services Section.
The pink, green, and yellow copies are sent to the proofreader.
Has the material been returned within a reasonable amount of time ?
No
Contact the braille proofreader.
Yes
3

## BOOKS

The print review copy and the braille material are sent to the proofreader.

FIGURE A-6 (cont'd)

MASTER PRODUCTION (VOLUNTEER) — IV

## FORMS

Authorization Invoice

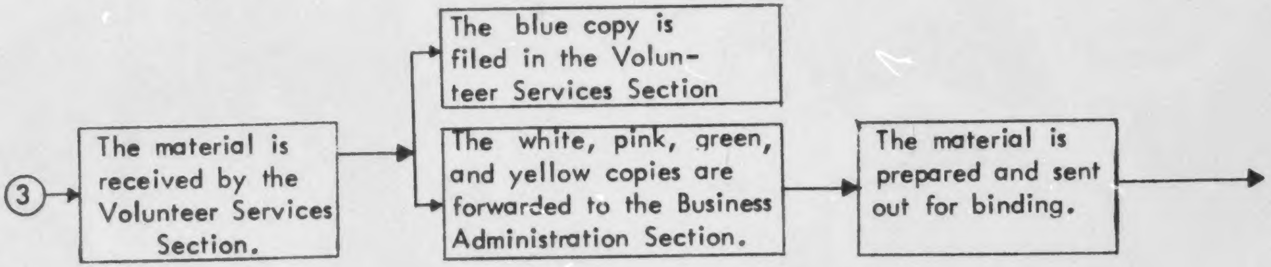
Returned with the number of volumes of braille proofread and the number of corrections indicated by the proofreader.

3 x 5 Card (Control Card)

The name of the bindery and the date the material was sent is placed on the card.

Authorization Invoice

## PROCEDURES



The material is received by the Volunteer Services Section.

The blue copy is filed in the Volunteer Services Section

The white, pink, green, and yellow copies are forwarded to the Business Administration Section.

The material is prepared and sent out for binding.

## BOOKS

One print review copy is returned along with the braille material to the Volunteer Services Section via the Field Services Section.

FIGURE A-6 (cont'd)

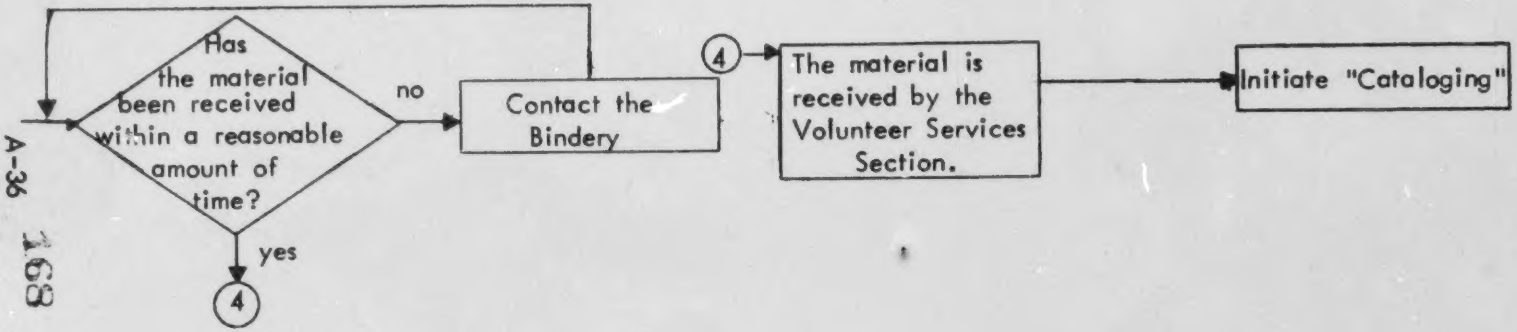
MASTER PRODUCTION (VOLUNTEER) — V

## FORMS

**Letter**

To the Bindery

## PROCEDURES


Has the material been received within a reasonable amount of time?
no
Contact the Bindery
yes
4
4
The material is received by the Volunteer Services Section.
Initiate "Cataloging"

## BOOKS

The review copy and the bound braille volumes are returned to the Volunteer Services Section.

The review copy and the braille material are forwarded to the Business Administration Section.

FIGURE A-6 (cont'd)

MASTER PRODUCTION (VOLUNTEER) — VI

## FORMS

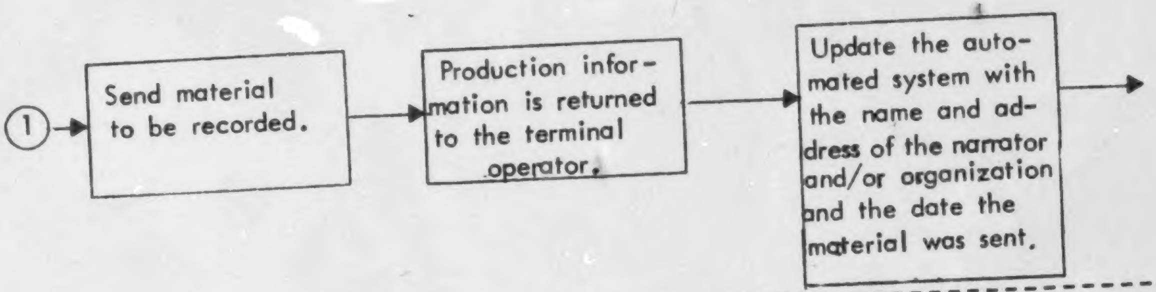
Control Form (two-part)

Data Elements: Title, Author, Control Number, RC/CBA, and Code for Volunteer Group/Individual. File These by both title and organization.

Volunteer Production Printout

The name and address of the narrator and/or organization, and the date the material was sent are added and the form is returned to the terminal operator to update the automated system.

## PROCEDURES


1
Send material to be recorded.
Production information is returned to the terminal operator.
Update the automated system with the name and address of the narrator and/or organization and the date the material was sent.

## BOOKS

The print review copies are sent to a volunteer group/individual, via the Tape Production Unit.

FIGURE A-6 (cont'd)

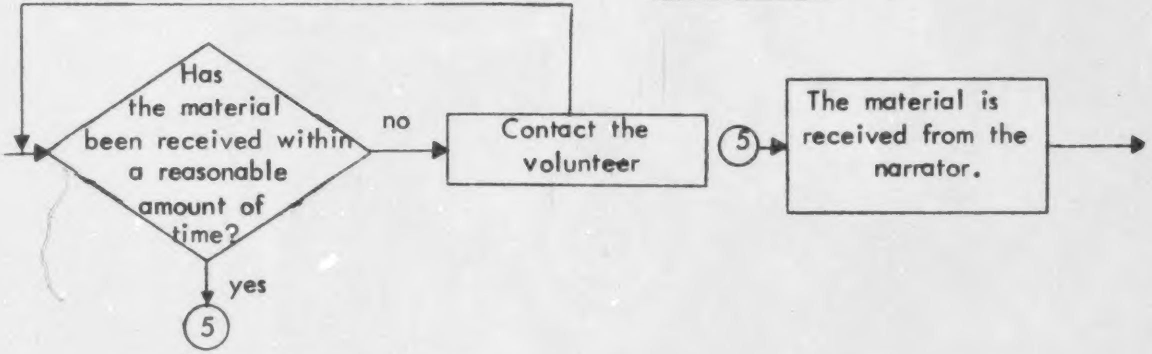
MASTER PRODUCTION (VOLUNTEER) — VII

## FORMS

### Control Form

Both copies are pulled. The original is placed in an in-process file. The copy is discarded.

## PROCEDURES


Has the material been received within a reasonable amount of time?
no
yes
5
Contact the volunteer
5
The material is received from the narrator.

## BOOKS

The print copies and the recorded material are returned to the Volunteer Services Section via the Field Services Section.

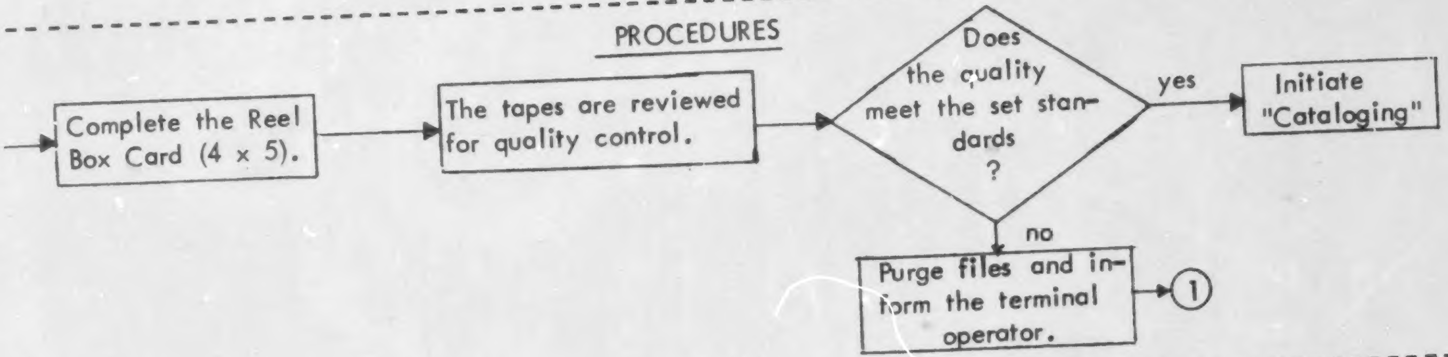
FIGURE A-6 (cont'd)

MASTER PRODUCTION (VOLUNTEER) — VIII

## FORMS

Reel Box Card (4 x 5)
Data elements: Title, Author, Control number, RC/CBA, Date Book Sent to Group/Individual, Code of Group/Name of Individual, Narrator, Monitor, Reviewer, and Number of Reels.

## PROCEDURES


Complete the Reel Box Card (4 x 5).
The tapes are reviewed for quality control.
Does the quality meet the set standards ?
yes
Initiate "Cataloging"
no
Purge files and inform the terminal operator.
1

## BOOKS

The material is forwarded to the Business Administration Section.

FIGURE A-6 (cont'd)

MASTER PRODUCTION (VOLUNTEER) — IX

## FORMS

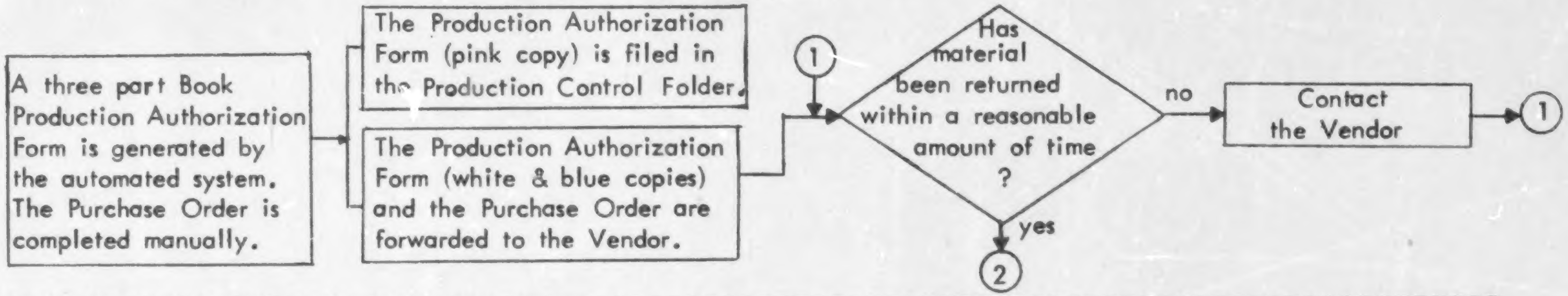
Book Production Authorization Form (three part)

Data Elements: Bibliographic Data, Number of Copies, Total Cost, and Purchase Order Number.

Purchase Order

Standard Purchase Order

## PROCEDURES



A three part Book Production Authorization Form is generated by the automated system. The Purchase Order is completed manually.

The Production Authorization Form (pink copy) is filed in the Production Control Folder.

The Production Authorization Form (white & blue copies) and the Purchase Order are forwarded to the Vendor.

Has material been returned within a reasonable amount of time ?

Contact the Vendor

## BOOKS

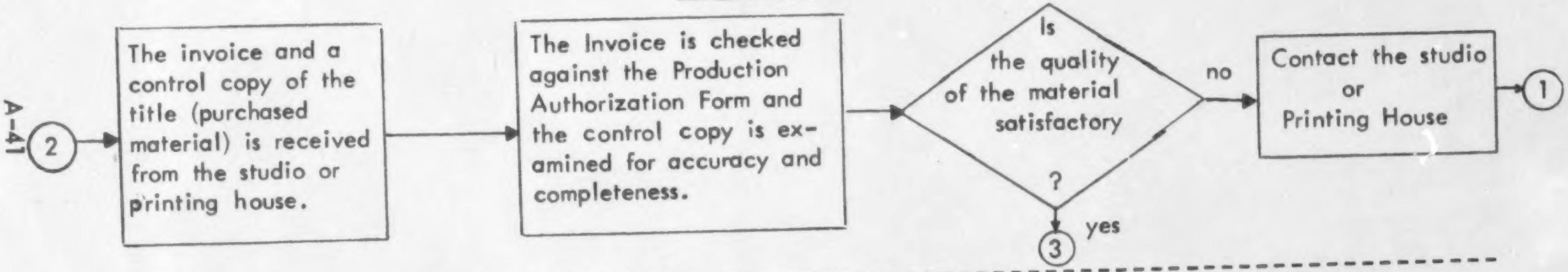
FIGURE A-7

MASS PRODUCTION — I

## FORMS

| | |
|---|---|
| **Invoice** | **Invoice** |
| An original and two copies are received from the Vendor. | **Production Authorization Form (Pink)** |
| | From the Production Control Folder. |

## PROCEDURES


2
The invoice and a control copy of the title (purchased material) is received from the studio or printing house.
The Invoice is checked against the Production Authorization Form and the control copy is examined for accuracy and completeness.
Is the quality of the material satisfactory ?
no
yes
3
Contact the studio or Printing House
1

## BOOKS

| | |
|---|---|
| A control copy of the purchased material is received by Business Administration Section via the Field Services Section. | The control copy is examined for quality control. |

FIGURE A-7 (cont'd)

MASS PRODUCTION — II

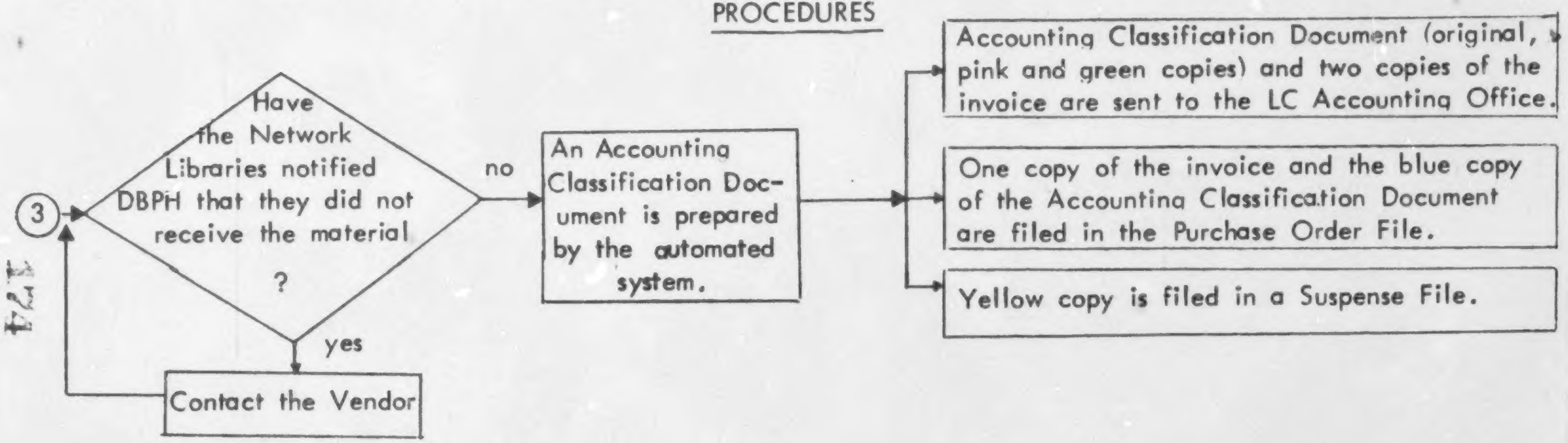
FORMS

Accounting Classification Document (five-part)

Data Elements: Purchase Order Number, Amount Paid, and Name of Vendor.

---

PROCEDURES


3
Have the Network Libraries notified DBPH that they did not receive the material ?
no
yes
Contact the Vendor
An Accounting Classification Document is prepared by the automated system.
Accounting Classification Document (original, pink and green copies) and two copies of the invoice are sent to the LC Accounting Office.
One copy of the invoice and the blue copy of the Accounting Classification Document are filed in the Purchase Order File.
Yellow copy is filed in a Suspense File.

---

BOOKS

---

FIGURE A-7 (cont'd)

MASS PRODUCTION — III

## FORMS

Memo

To the Business Administration Section from the Music Section.

Purchase Order

- To contractor (original)
- To suspense file (copy) in the Music Section.

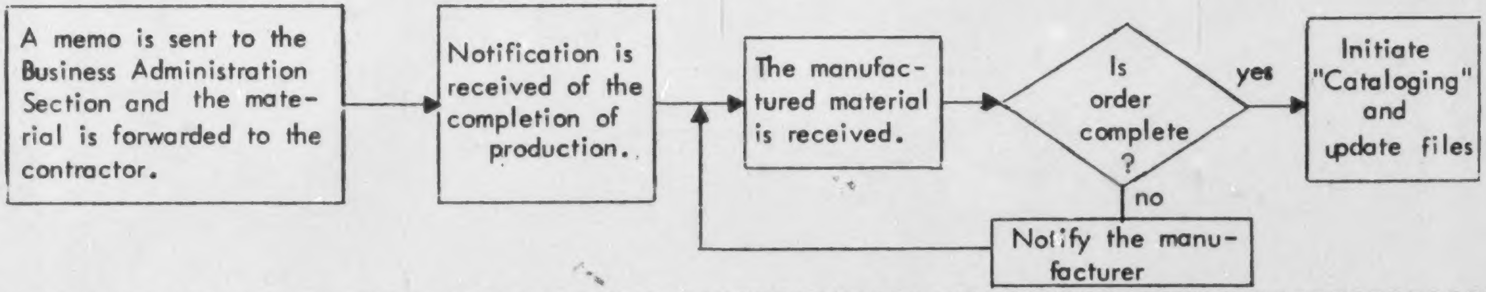
Shipping Notice or Completion Card

To the Music Section

Shipping Notice

To Business Administration Section

## PROCEDURES


A memo is sent to the Business Administration Section and the material is forwarded to the contractor.
Notification is received of the completion of production.
The manufactured material is received.
Is order complete ?
yes
no
Initiate "Cataloging" and update files
Notify the manufacturer

## BOOKS

Print book to contractor

Manufactured Material to the Music Section via the Field Services Section.

FIGURE A-7 (cont'd)

MASS PRODUCTION (MUSIC)

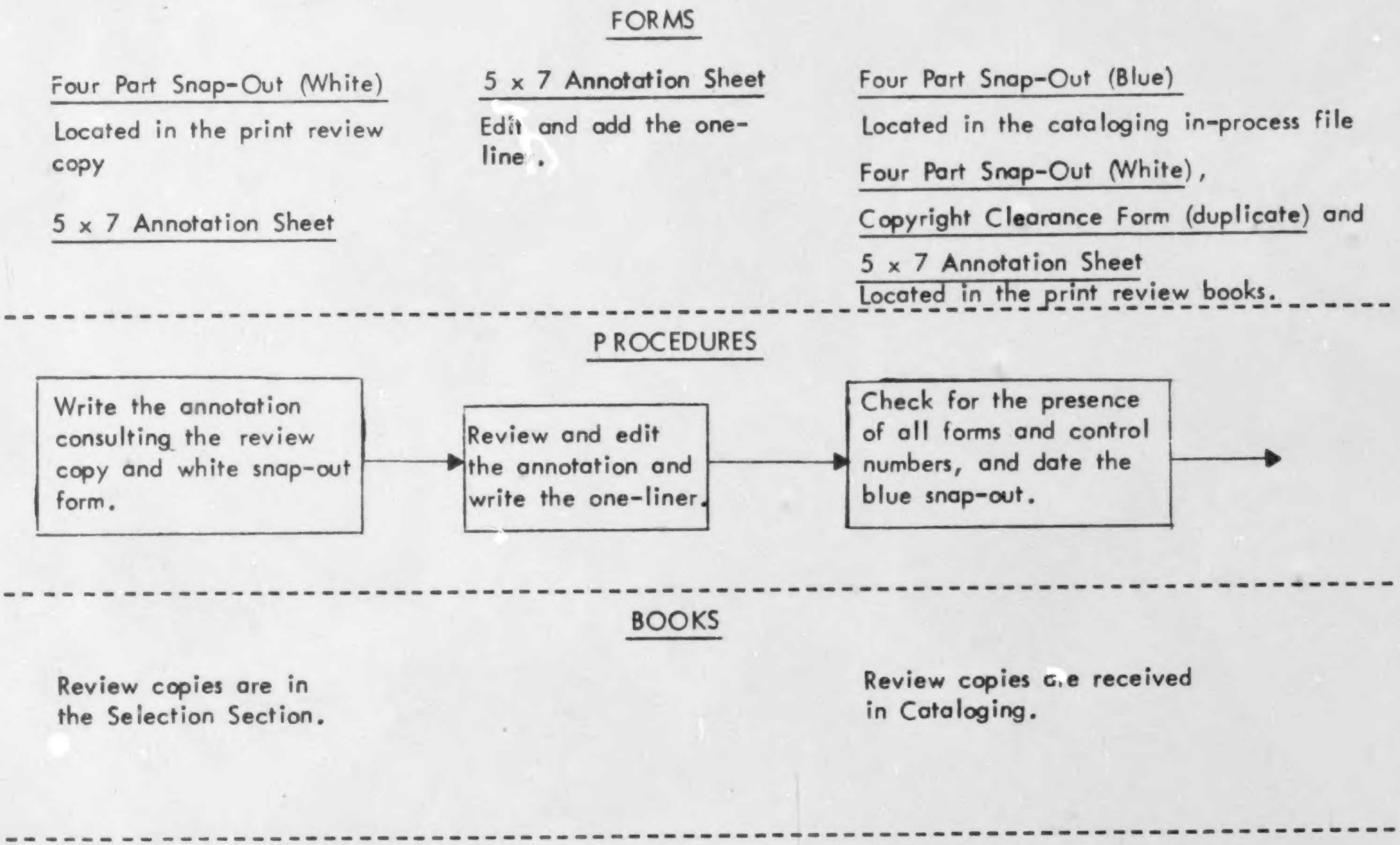

FORMS
Four Part Snap-Out (White)
Located in the print review copy
5 x 7 Annotation Sheet
5 x 7 Annotation Sheet
Edit and add the one-liner.
Four Part Snap-Out (Blue)
Located in the cataloging in-process file
Four Part Snap-Out (White),
Copyright Clearance Form (duplicate) and
5 x 7 Annotation Sheet
Located in the print review books.
PROCEDURES
Write the annotation consulting the review copy and white snap-out form.
Review and edit the annotation and write the one-liner.
Check for the presence of all forms and control numbers, and date the blue snap-out.
BOOKS
Review copies are in the Selection Section.
Review copies are received in Cataloging.

FIGURE A-8

CATALOGING — I

## FORMS

**5 x 7 Annotation Sheet**

Used to create the annotation record.

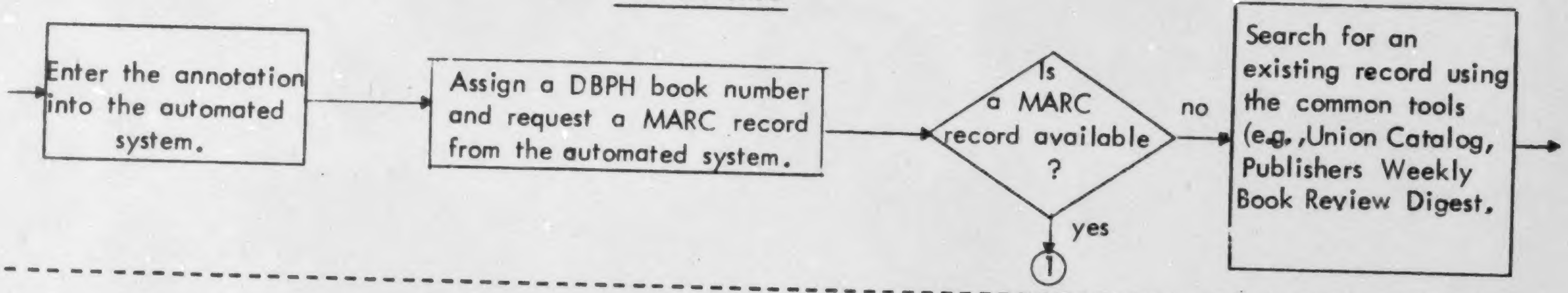
**Completion Notice**

Data elements; Narrator (if applicable) and Collation.

**Four Part Snap-Out (white) and Completion Notice**

To Cataloging.

## PROCEDURES


Enter the annotation into the automated system.
Assign a DBPH book number and request a MARC record from the automated system.
Is a MARC record available ?
no
yes
①
Search for an existing record using the common tools (e.g.,Union Catalog, Publishers Weekly Book Review Digest.

## BOOKS

Review copies are received by the Business Administration Section and sent out for "Master Production."

One review copy is received by the Business Administration Section from "Master Production."

The review copy is received by Cataloging.

FIGURE A-8 (cont'd)

CATALOGING — II

Manuscript Card

Data Elements: Author, Title, Imprint, Studio, Annotation, Subject Headings, Added Entries, DBPH Production Control #, DBPH Book #, and One Liner on the back.

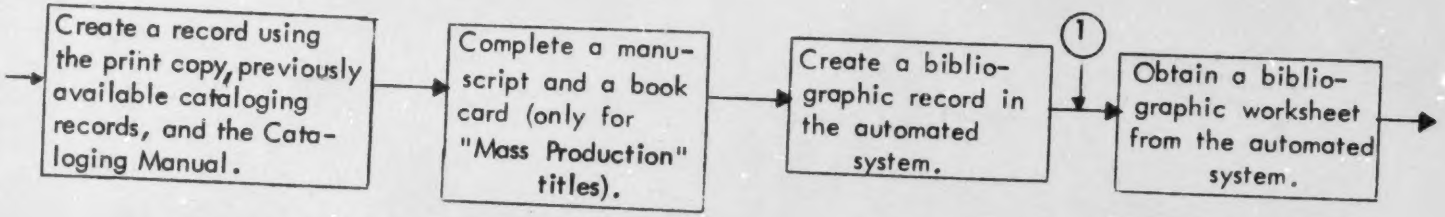
Book Card

Data Elements: Author, Title, Annotation, Media, and Dewey Number.

Bibliographic Worksheet

Contains all bibliographic tags required by DBPH.

PROCEDURES


Create a record using the print copy, previously available cataloging records, and the Cataloging Manual.
Complete a manuscript and a book card (only for "Mass Production" titles).
Create a bibliographic record in the automated system.
①
Obtain a bibliographic worksheet from the automated system.

BOOKS

Print review copy to Cataloging if not already there.

FIGURE A-8 (cont'd)

CATALOGING — III

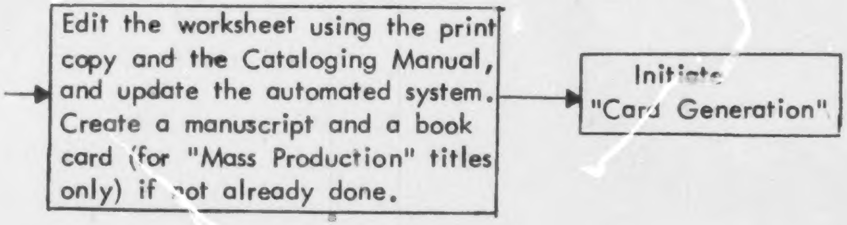
## FORMS

**Bibliographic Worksheet**

This is edited and then sent to the Business Administration Section to update the automated system.

---

## PROCEDURES



Edit the worksheet using the print copy and the Cataloging Manual, and update the automated system. Create a manuscript and a book card (for "Mass Production" titles only) if not already done.

Initiate "Card Generation"

---

## BOOKS

---

FIGURE A-8 (cont'd)

CATALOGING — IV

## FORMS

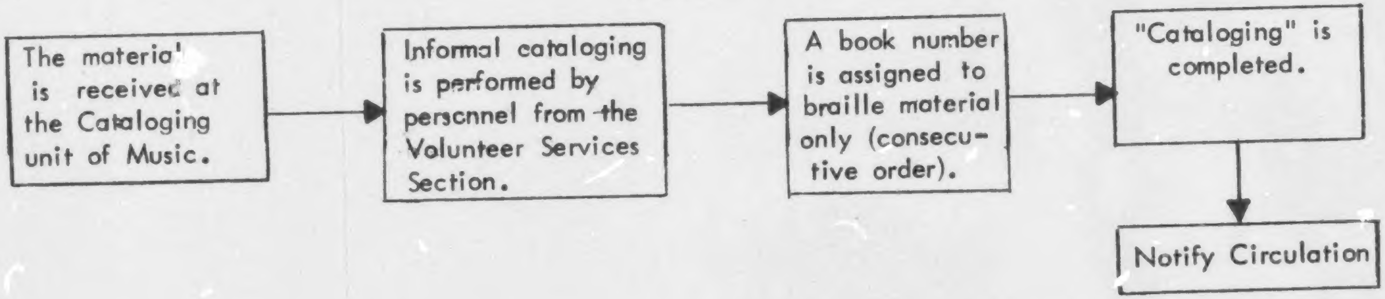
Preparation of Cards

. Overprinting

Card

To catalog

## PROCEDURES


The material is received at the Cataloging unit of Music.
Informal cataloging is performed by personnel from the Volunteer Services Section.
A book number is assigned to braille material only (consecutive order).
"Cataloging" is completed.
Notify Circulation

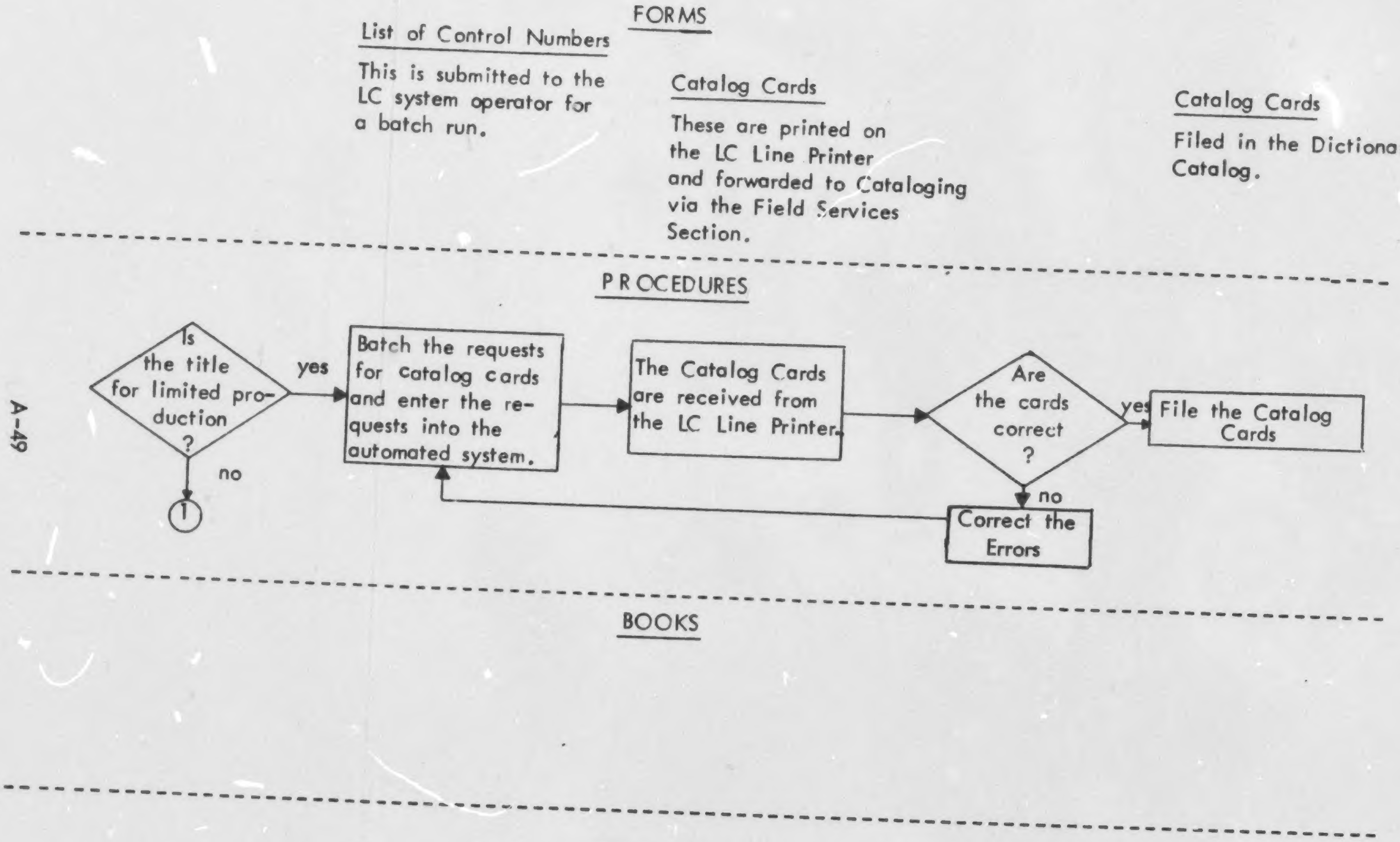
## BOOKS

The print books are forwarded to the Cataloging Unit of Music.

Material to shelf.

FIGURE A-8 (cont'd)

CATALOGING (MUSIC)



FORMS
List of Control Numbers
This is submitted to the LC system operator for a batch run.
Catalog Cards
These are printed on the LC Line Printer and forwarded to Cataloging via the Field Services Section.
Catalog Cards
Filed in the Dictionary Catalog.
PROCEDURES
Is the title for limited production ?
yes
no
1
Batch the requests for catalog cards and enter the requests into the automated system.
The Catalog Cards are received from the LC Line Printer.
Are the cards correct ?
yes
File the Catalog Cards
no
Correct the Errors
BOOKS

FIGURE A-9

CARD GENERATION — I

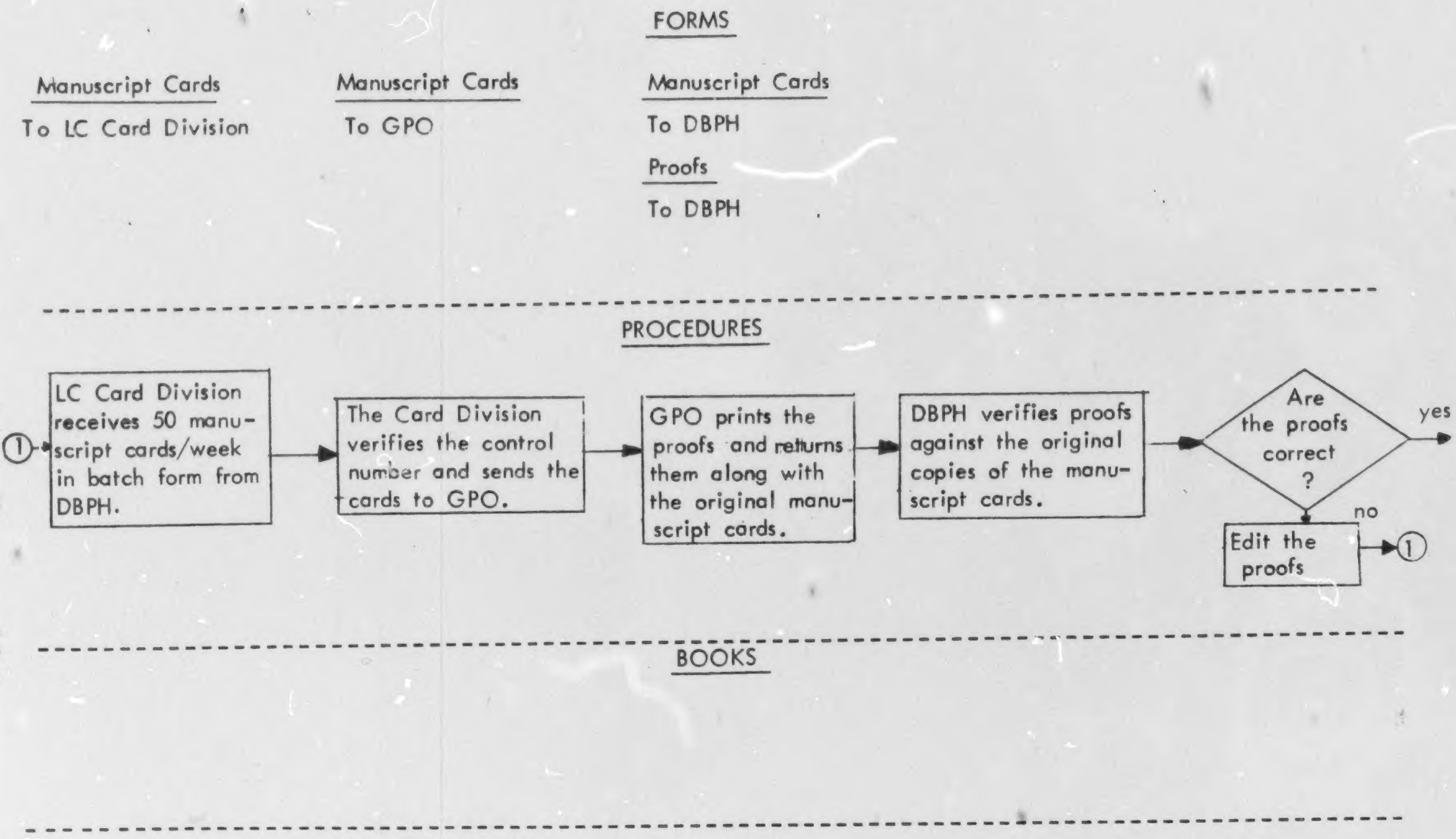

FORMS
Manuscript Cards
To LC Card Division
Manuscript Cards
To GPO
Manuscript Cards
To DBPH
Proofs
To DBPH
PROCEDURES
①
LC Card Division receives 50 manuscript cards/week in batch form from DBPH.
The Card Division verifies the control number and sends the cards to GPO.
GPO prints the proofs and returns them along with the original manuscript cards.
DBPH verifies proofs against the original copies of the manuscript cards.
Are the proofs correct ?
yes
no
Edit the proofs
①
BOOKS

FIGURE A-9 (cont'd)

CARD GENERATION — II

FORMS

Catalog Cards

Cards are filed in the Dictionary Catalog and put into Card Stock.

Catalog Cards

Cards are sent to LC Card Division and then out to the Network Libraries.

PROCEDURES

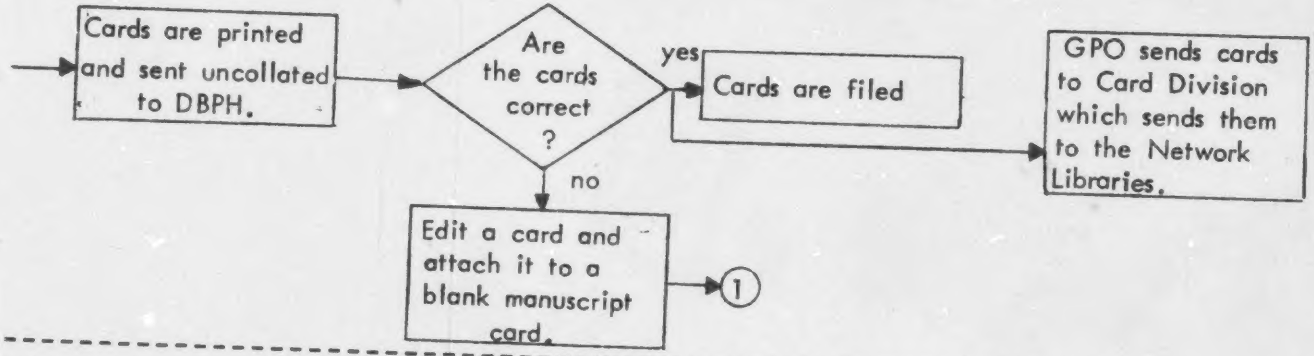
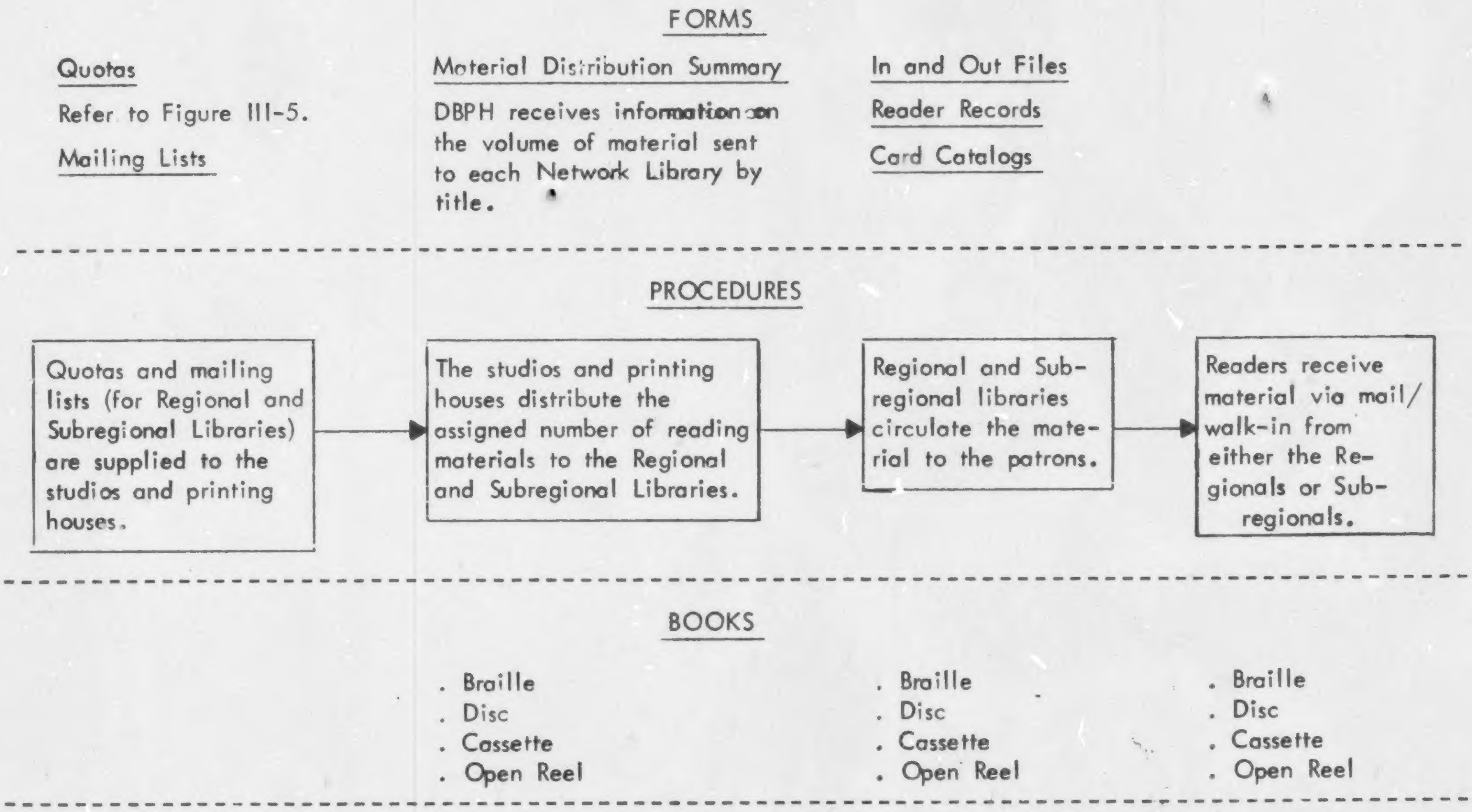

Cards are printed and sent uncollated to DBPH.
Are the cards correct ?
yes
no
Cards are filed
GPO sends cards to Card Division which sends them to the Network Libraries.
Edit a card and attach it to a blank manuscript card.
1

FIGURE A-9 (cont'd)

CARD GENERATION — III



FORMS

Quotas

Refer to Figure III-5.

Mailing Lists

Material Distribution Summary

DBPH receives information on the volume of material sent to each Network Library by title.

In and Out Files

Reader Records

Card Catalogs

PROCEDURES

Quotas and mailing lists (for Regional and Subregional Libraries) are supplied to the studios and printing houses.

The studios and printing houses distribute the assigned number of reading materials to the Regional and Subregional Libraries.

Regional and Subregional libraries circulate the material to the patrons.

Readers receive material via mail/walk-in from either the Regionals or Subregionals.

BOOKS

. Braille
. Disc
. Cassette
. Open Reel

. Braille
. Disc
. Cassette
. Open Reel

. Braille
. Disc
. Cassette
. Open Reel

FIGURE A-10

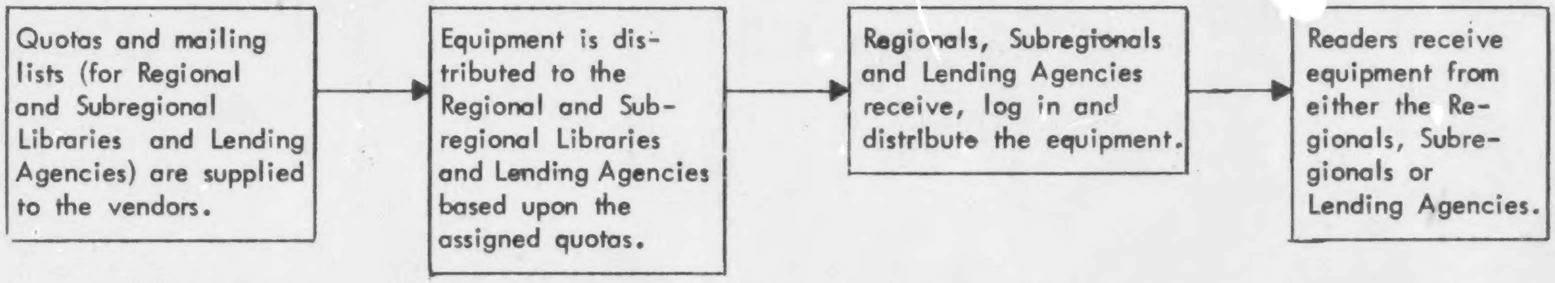
DISTRIBUTION (READING MATERIAL)

## FORMS

| Quotas | Equipment Distribution Summary | Recorded Data |
|---|---|---|
| Developed from surveys. | DBPH receives information on the volume of equipment sent to each Network Library or Lending Agency by model. | . Serial Number<br>. Model Number<br>. Name of Vendor<br>. Name of Reader<br>. Address of Reader |
| Mailing Lists | | |

---

## PROCEDURE



Quotas and mailing lists (for Regional and Subregional Libraries and Lending Agencies) are supplied to the vendors.

Equipment is distributed to the Regional and Subregional Libraries and Lending Agencies based upon the assigned quotas.

Regionals, Subregionals and Lending Agencies receive, log in and distribute the equipment.

Readers receive equipment from either the Regionals, Subregionals or Lending Agencies.

---

## BOOKS

| | | |
|---|---|---|
| . Talking Book Machines<br>. Cassette Players<br>. Accessories | . Talking Book Machines<br>. Cassette Players<br>. Accessories | . Talking Book Machines<br>. Cassette Players<br>. Accessories |

---

FIGURE A-10 (cont'd)

DISTRIBUTION (EQUIPMENT)

"Publication Activities" entails all procedures related to the development and production of DBPH material to be published. This function includes the writing, gathering, and/or editorial review of material for public information, book selection tools, and reference publications (directories, pamphlets, etc.). Also included is the development and finalization of DBPH periodicals (Talking Book Topics, Braille Book Review, etc.) and catalogs.

FIGURE A-11

PUBLICATION ACTIVITIES

This function contains procedures which coordinate the shelf list with the actual material on the shelf. Inventories of books lost, in bad repair, or otherwise off the shelf are performed, and the results serve as input to the "Selection" process. Gaps on the shelves and in the card catalog are also investigated.

FIGURE A-12

COLLECTION MAINTENANCE

This function involves the preparation of lists of titles concerning specific subjects available in special media for the blind and physically handicapped. An example is "Cookbooks: Braille and Recorded Media" (April, 1974). Within DBPH, the following sections currently perform this task: Special Services (short bibliographies on very specific subjects in special media), Selection (medium length bibliographies on special areas, to aid in collection development), Cataloging (extensive bibliographies such as a listing of all the "Western's" within the collection), and Reference (general purpose bibliographies on a wide range of subjects, not necessarily in any special media). The Selection Section is also responsible for the preparation of bibliographies for Talking Book Topics and Braille Book Review.

FIGURE A-13

PREPARATION OF BIBLIOGRAPHIES

DBPH has minimal contact with the readers it serves; most circulation is doen by the Regional and Subregional Libraries.

Currently, only the Music Section (refer to the following workflow) and the Special Services Section (See Figure III-19) are responsible for direct circulation to the patrons of DBPH.

FIGURE A-14

CIRCULATION

FORMS

Letter

To DBPH

Interlibrary Loan Form

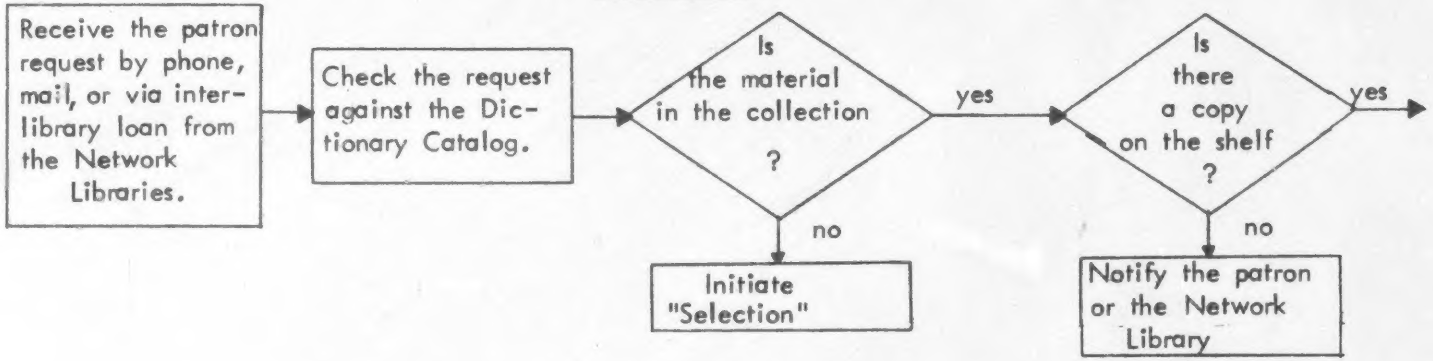
Letter

To the patron

Interlibrary Loan Form

To the Network Library.

PROCEDURES


Receive the patron request by phone, mail, or via interlibrary loan from the Network Libraries.
Check the request against the Dictionary Catalog.
Is the material in the collection ?
yes
no
Initiate "Selection"
Is there a copy on the shelf ?
yes
no
Notify the patron or the Network Library

BOOKS

FIGURE A-14 (cont'd)

MUSIC CIRCULATION — I

## FORMS

Patron Card

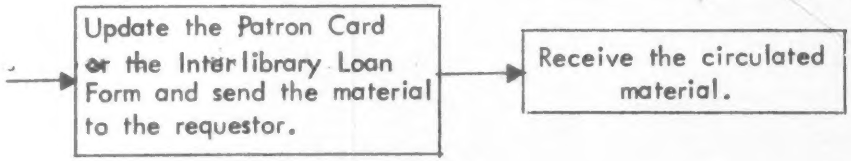
Update and file.

Interlibrary Loan Form

Complete the form, file a record of it and return it to the Network Library.

---

## PROCEDURES


Update the Patron Card or the Interlibrary Loan Form and send the material to the requestor.
Receive the circulated material.

---

## BOOKS

The material is sent to the patron or the network library.

The material is received via the Field Services Section, and shelved.

---

FIGURE A-14 (cont'd)

MUSIC CIRCULATION — II

## FORMS

LC73-135 (12/73) (white & yellow)

Data Elements: Date Received; Name and Address of Library; Send to Library/Patron; Author, Title, or Subject; Media; Comments and Authorization; and Patrons Address (if applicable)

LC73-135 (12/73)

LC73-121b (Rev 12/73) (six-part)

Data Elements: Name of Library, DBPH Book Number, Media, Date Initiated Date Material Sent, Reserve Status, and Name and Address of Recipient.

TWX and Telephone Request Form

Transferred to LC73-121b, if a "numbered" request.

## PROCEDURES

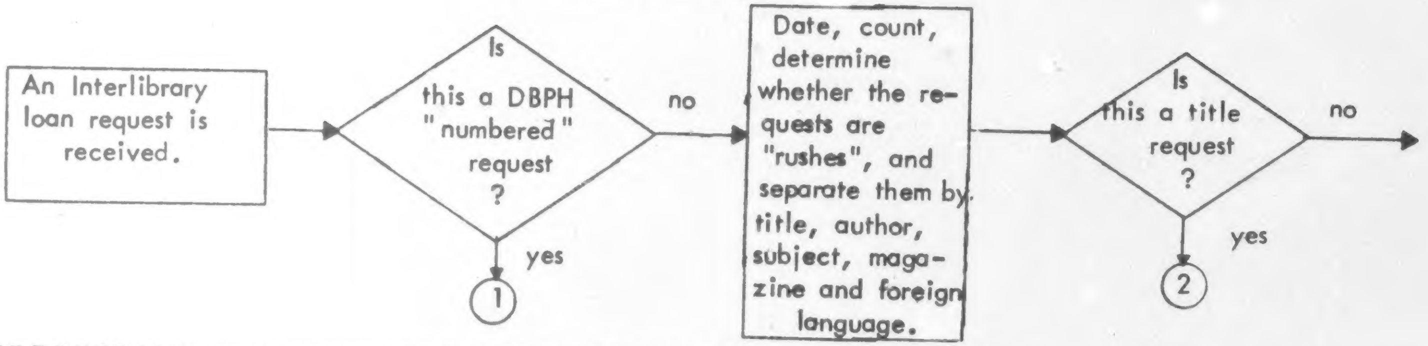

An Interlibrary loan request is received.
Is this a DBPH "numbered" request ?
no
yes
1
Date, count, determine whether the requests are "rushes", and separate them by title, author, subject, magazine and foreign language.
Is this a title request ?
no
yes
2

FIGURE A-15

INTERLIBRARY LOAN — I

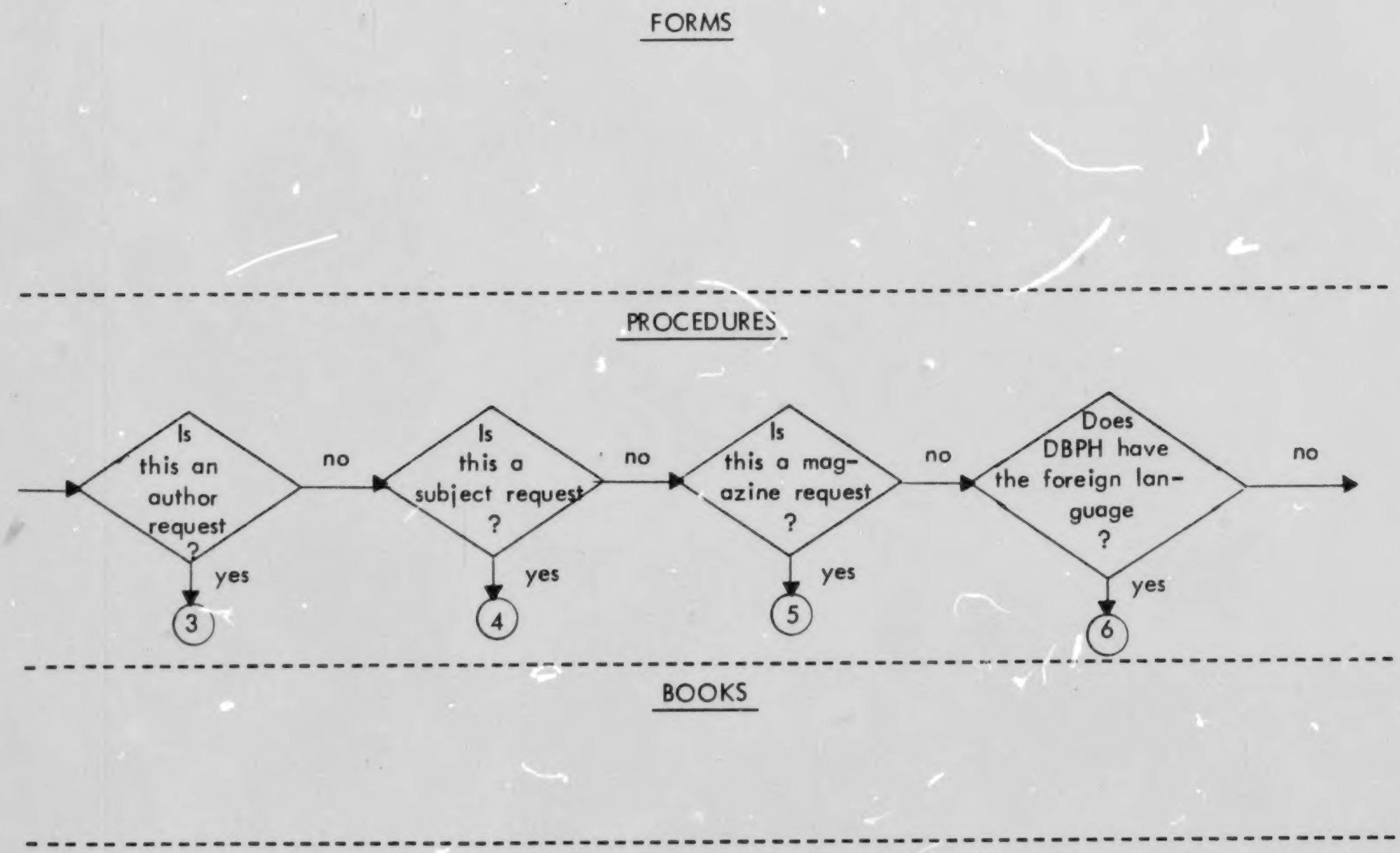

FORMS
PROCEDURES
Is this an author request ?
no
yes
3
Is this a subject request ?
no
yes
4
Is this a magazine request ?
no
yes
5
Does DBPH have the foreign language ?
no
yes
6
BOOKS

FIGURE A-15 (cont'd)

INTERLIBRARY LOAN — II

FORMS

LC73-135 (12/73)

Send the yellow part (b) to the requesting library. File the white part (a), by month.

Letter

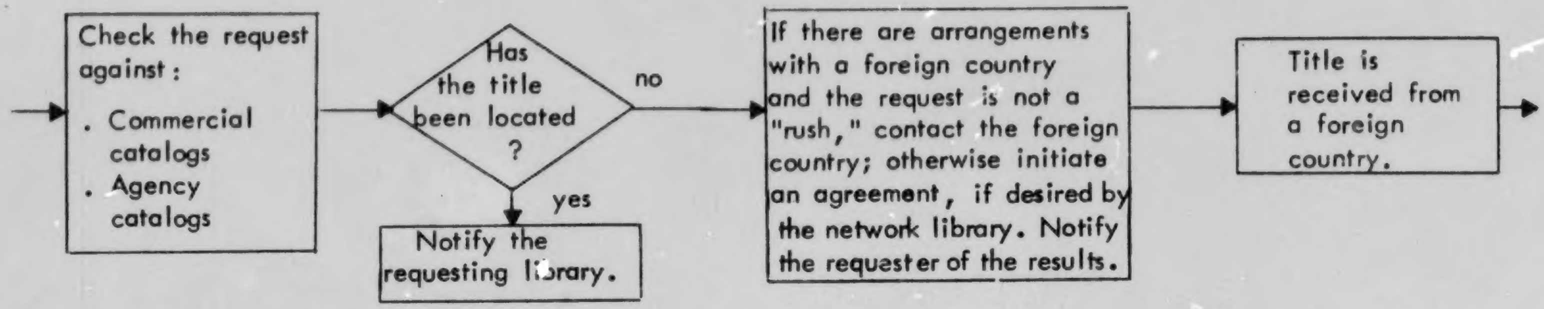
To the foreign country.

Letter

To the requester.

---

PROCEDURES


Check the request against:
. Commercial catalogs
. Agency catalogs
Has the title been located ?
no
yes
Notify the requesting library.
If there are arrangements with a foreign country and the request is not a "rush," contact the foreign country; otherwise initiate an agreement, if desired by the network library. Notify the requester of the results.
Title is received from a foreign country.

---

BOOKS

The material is received via the Field Services Section from the foreign country.

---

FIGURE **A-15** (cont'd)

INTERLIBRARY LOAN — III

## FORMS

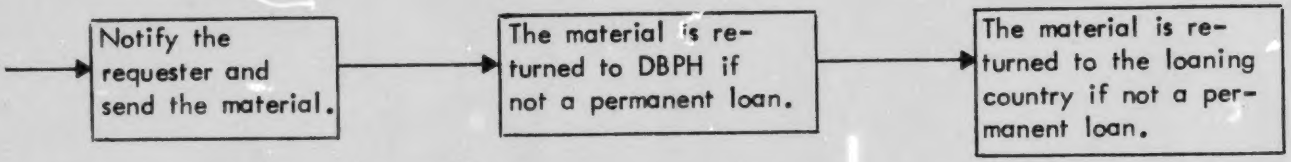
LC73-121b (Rev 12/73)

- Complete this form using LC73-135
- Discard parts a,b,d, and e.
- Attach part f to the material.
- Send part c to the requesting Library.

LC73-135 (12/73)

- Attach part b to part c of LC73-121b (if applicable).

## PROCEDURES


Notify the requester and send the material.
The material is returned to DBPH if not a permanent loan.
The material is returned to the loaning country if not a permanent loan.

## BOOKS

| | | |
|---|---|---|
| The material is forwarded to the requesting library. | The material is received via the Field Services Section. | The material is sent to the Foreign Country via the Field Services Section. |

FIGURE A-15 (cont'd)

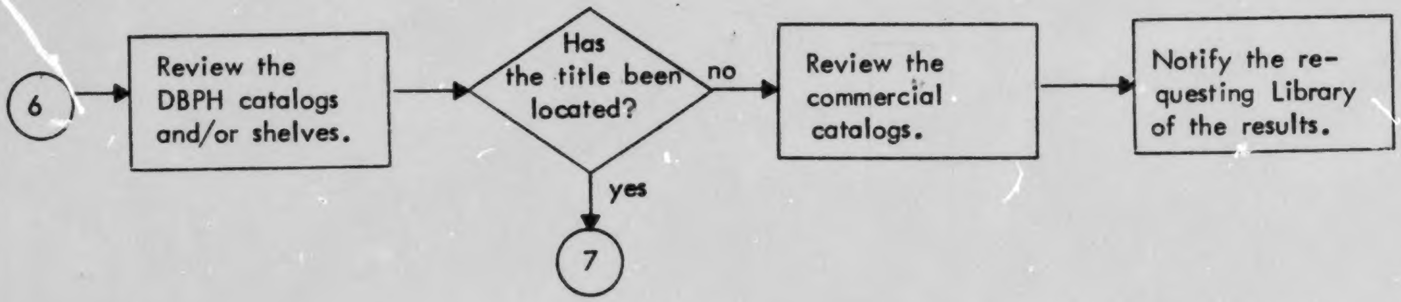
INTERLIBRARY LOAN - IV

FORMS

LC73-135 (12/73)

- Date copies of the form.
- File the white copy (a), by month.
- Send the yellow (b) copy to the requesting Library.

PROCEDURES


6
Review the DBPH catalogs and/or shelves.
Has the title been located?
no
yes
7
Review the commercial catalogs.
Notify the requesting Library of the results.

BOOKS

FIGURE A-15 (cont'd)

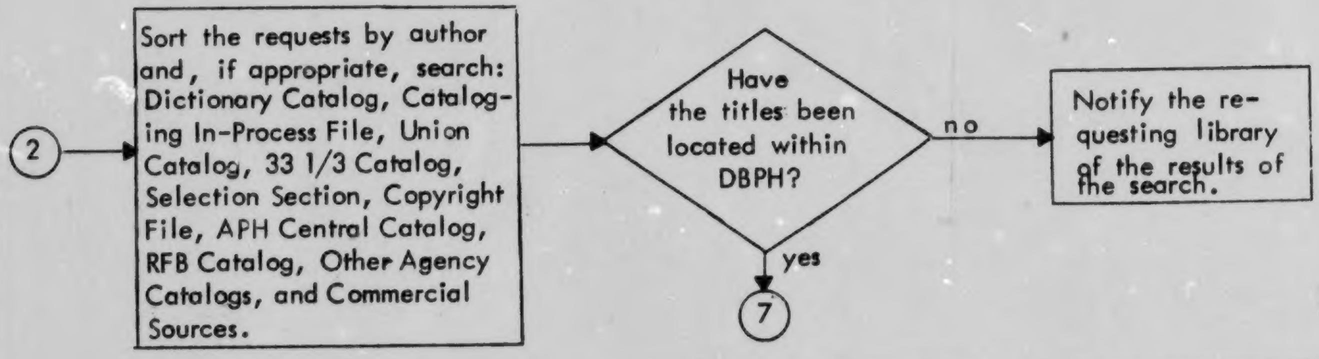
INTERLIBRARY LOAN - V

FORMS

LC73-135 (12/73)

- Date both copies of the form.
- File the white copy (a) by month.
- Send the yellow copy (b) to the requesting Library.

PROCEDURES


2
Sort the requests by author and, if appropriate, search: Dictionary Catalog, Cataloging In-Process File, Union Catalog, 33 1/3 Catalog, Selection Section, Copyright File, APH Central Catalog, RFB Catalog, Other Agency Catalogs, and Commercial Sources.
Have the titles been located within DBPH?
no
Notify the requesting library of the results of the search.
yes
7

BOOKS

FIGURE A-15 (cont'd)

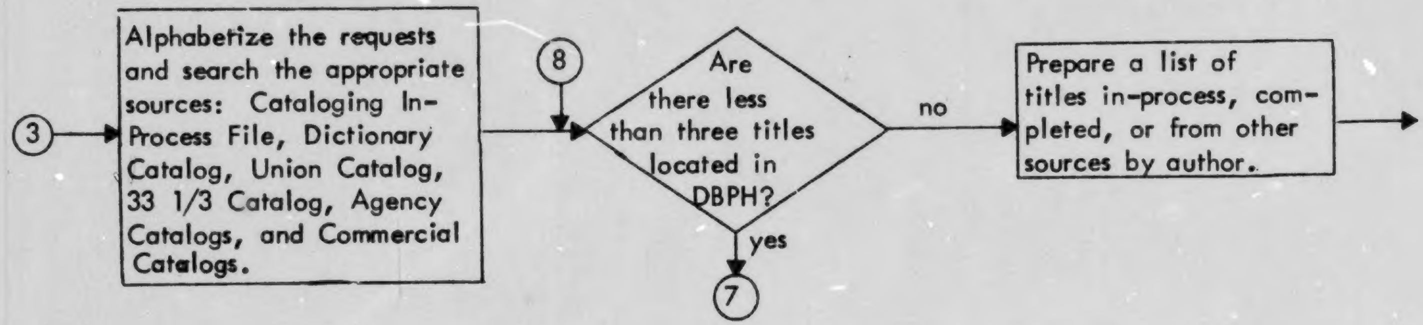
INTERLIBRARY LOAN - VI

FORMS

TITLE LIST

Data elements: Title
Author, Book or Order
Number, Publisher,
and Date of Publication.

PROCEDURES


3
Alphabetize the requests and search the appropriate sources: Cataloging In-Process File, Dictionary Catalog, Union Catalog, 33 1/3 Catalog, Agency Catalogs, and Commercial Catalogs.
8
Are there less than three titles located in DBPH?
no
yes
7
Prepare a list of titles in-process, completed, or from other sources by author.

BOOKS

FIGURE A-15 (cont'd)

INTERLIBRARY LOAN - VII

## FORMS

**TITLE LIST**

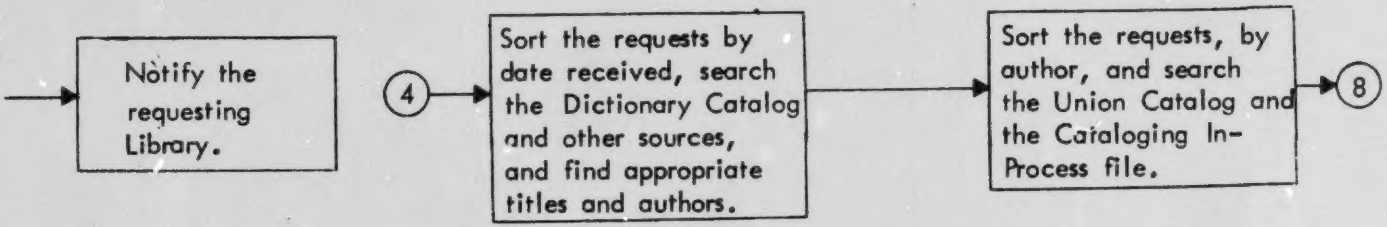
To the requesting library
LC73-135 (12/73)

- The white copy (a) is filed.
- The yellow copy (b) is attached to the Title list.

LC73-135 (12/73)

LC73-135 (12/73)

## PROCEDURES



Notify the requesting Library.

Sort the requests by date received, search the Dictionary Catalog and other sources, and find appropriate titles and authors.

Sort the requests, by author, and search the Union Catalog and the Cataloging In-Process file.

## BOOKS

FIGURE A-15 (cont'd)

INTERLIBRARY LOAN - VIII

FORMS

LC73-135 (12/73)

- The white copy (a) is filed, by month.
- The yellow copy (b) is sent to the requesting library.

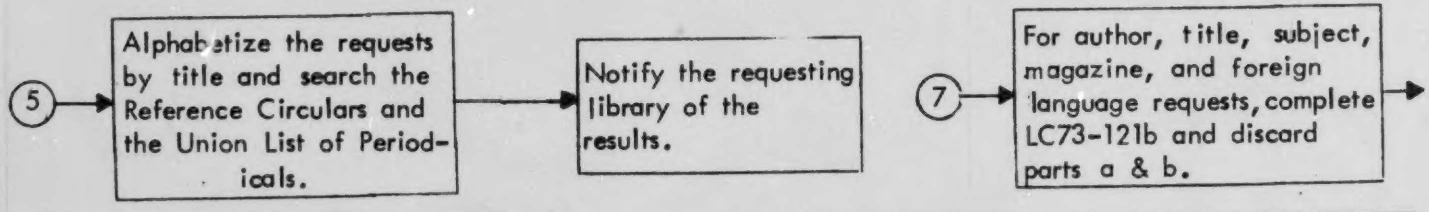
LC73-121b (Rev 12/73)

- Complete and discard parts a & b.

LC73-135 (12/73)

- File the white copy (a), by month.
- File the yellow copy (b) in a pending file.

PROCEDURES



Alphabetize the requests by title and search the Reference Circulars and the Union List of Periodicals.

Notify the requesting library of the results.

For author, title, subject, magazine, and foreign language requests, complete LC73-121b and discard parts a & b.

BOOKS

FIGURE A-15 (cont'd)

INTERLIBRARY LOAN - IX

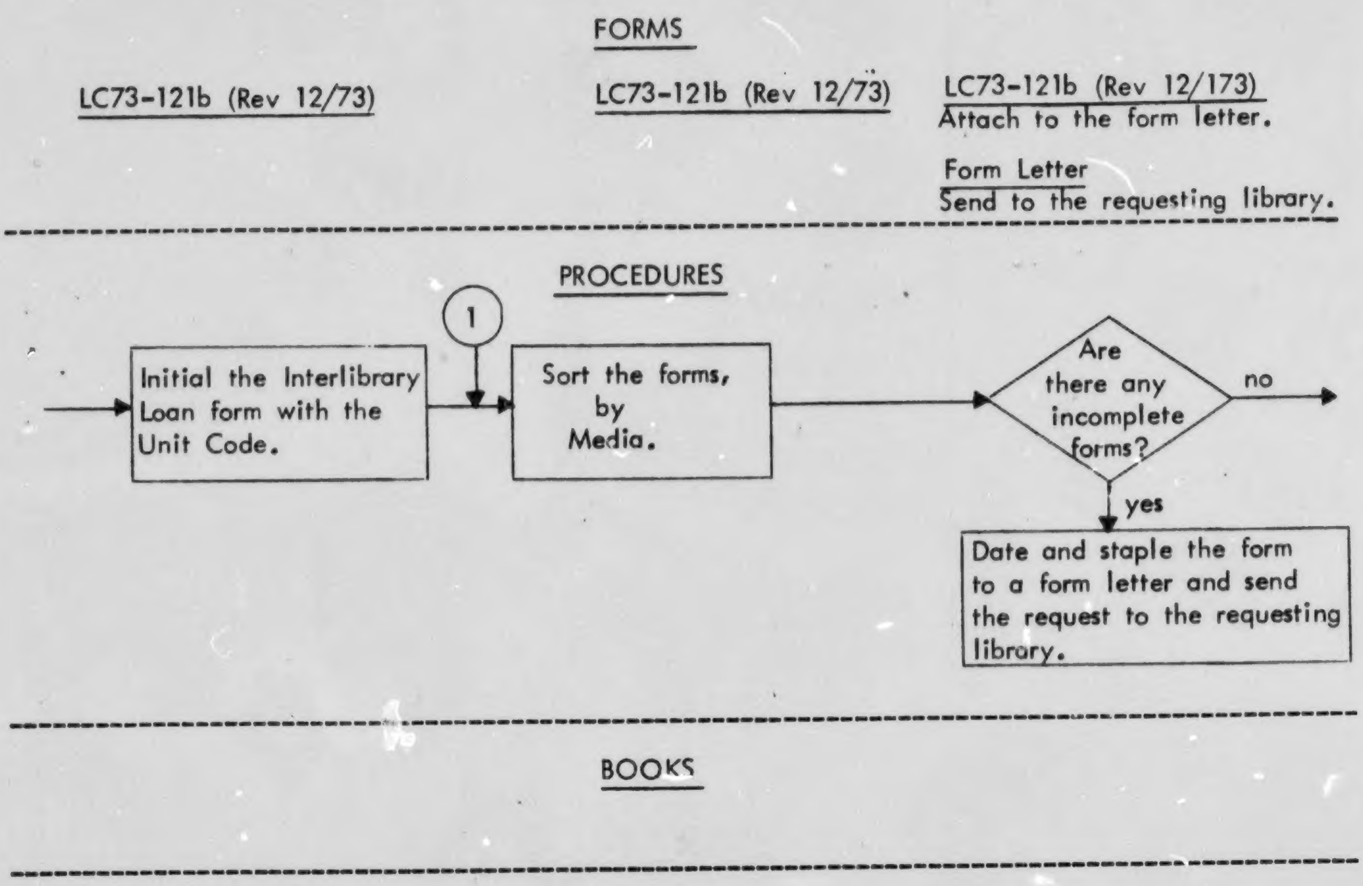

FORMS
LC73-121b (Rev 12/73)
LC73-121b (Rev 12/73)
LC73-121b (Rev 12/173)
Attach to the form letter.
Form Letter
Send to the requesting library.
PROCEDURES
Initial the Interlibrary Loan form with the Unit Code.
1
Sort the forms, by Media.
Are there any incomplete forms?
no
yes
Date and staple the form to a form letter and send the request to the requesting library.
BOOKS

FIGURE A-15 (cont'd)

INTERLIBRARY LOAN - X

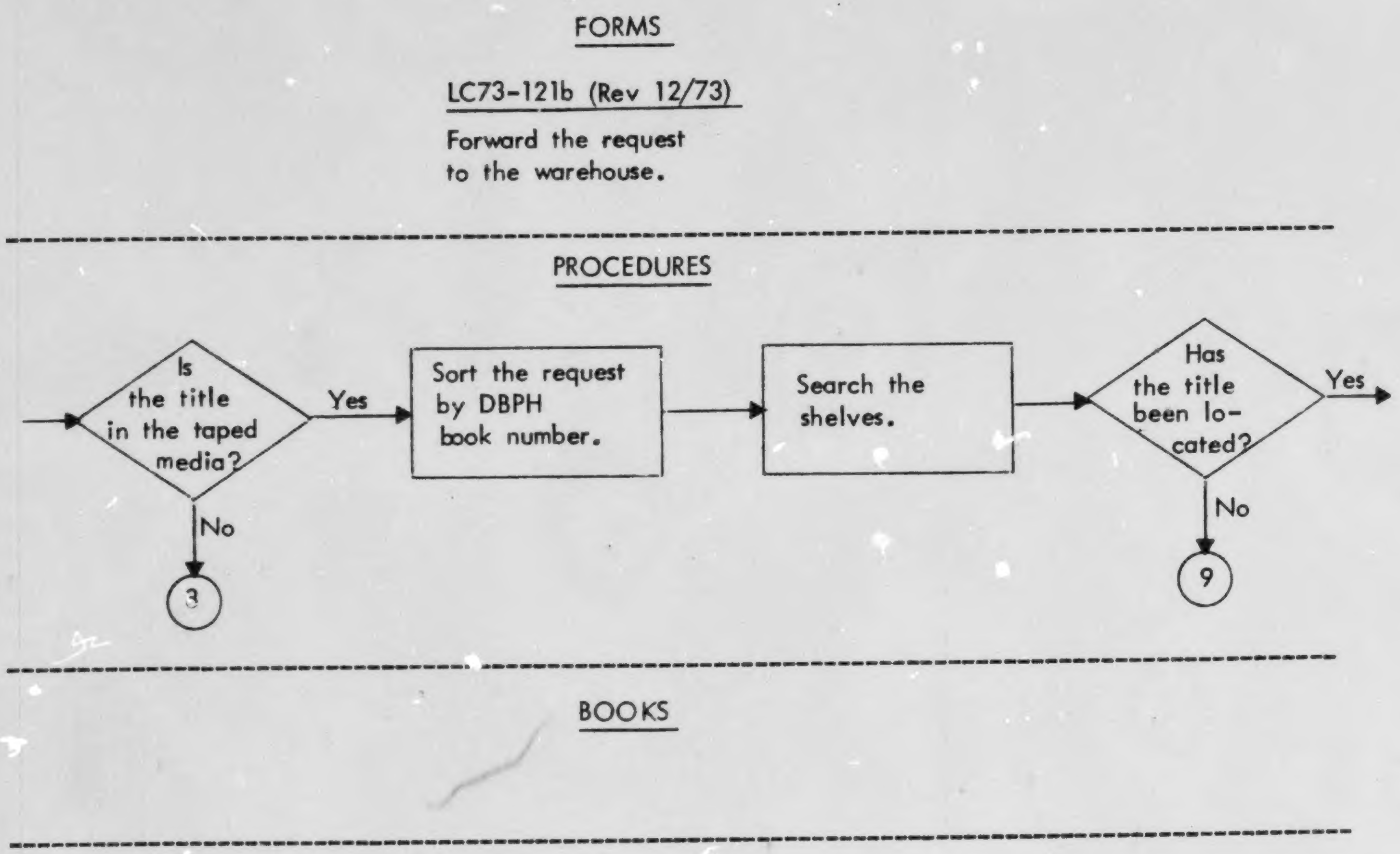

FORMS
LC73-121b (Rev 12/73)
Forward the request to the warehouse.
PROCEDURES
Is the title in the taped media?
Yes
No
3
Sort the request by DBPH book number.
Search the shelves.
Has the title been lo-cated?
Yes
No
9
BOOKS

FIGURE A-15 (cont'd)

INTERLIBRARY LOAN - XI

FORMS

LC73-121b (Rev 12/73)

- Attach part F to the tape material.
- Forward the remaining parts to the Library Service Section.

LC73-121b (Rev 12/73)

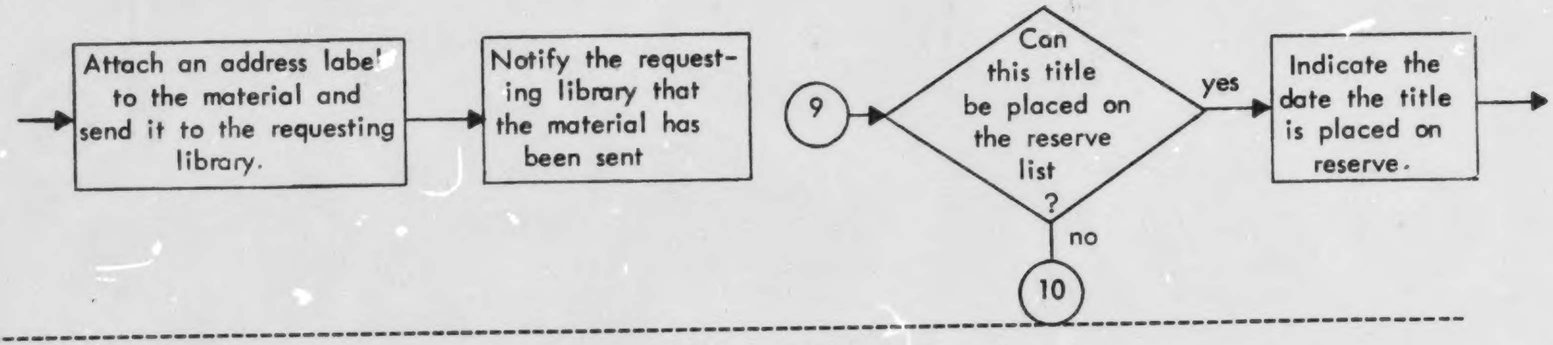
- Record the date sent on all parts.
- Discard part D.
- File part E, by month.
- Send part C to the requesting library.

LC73-135 (12/73)

- Attach part B to part C of LC73-121b (if applicable).

LC73-121b (Rev 12/73)

- Send to the Library Service Section.
- Indicate reserve date on all parts.


Attach an address label to the material and send it to the requesting library.
Notify the requesting library that the material has been sent
9
Can this title be placed on the reserve list ?
yes
no
10
Indicate the date the title is placed on reserve.

BOOKS

Forward the tape material to the requesting library.

FIGURE A-15 (cont'd)

INTERLIBRARY LOAN-XII

FORMS

LC73-121b (Rev 12/73)

- Send part C to the library.
- File parts D, E, and F in the tape reserve file.

LC73-135 (12/73)

- Attach part B to part C of LC73-121b (if applicable).

LC73-121b (Rev 12/73)

Leave parts D, E, and F in the tape reserve file.

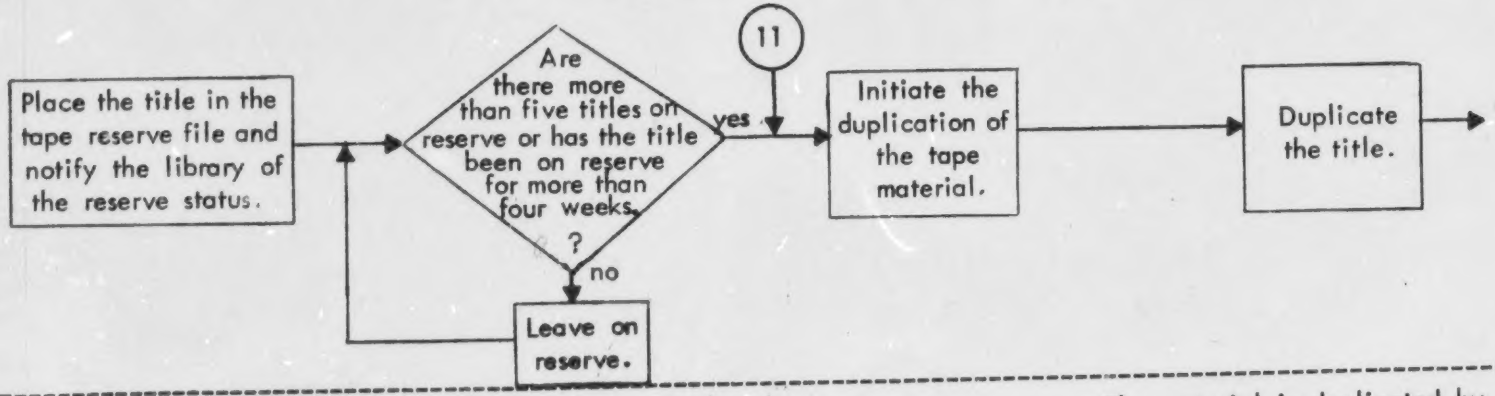
LC73-121b (Rev 12/73)

Order the requests by "Rush" or "Routine" and place parts D, E, and F in the duplication box.

LC73-121b (Rev 12/73)

Stamp the duplication date on all parts.

PROCEDURES


Place the title in the tape reserve file and notify the library of the reserve status.
Are there more than five titles on reserve or has the title been on reserve for more than four weeks?
yes
no
Leave on reserve.
11
Initiate the duplication of the tape material.
Duplicate the title.

BOOKS

The material is duplicated by the Tape Duplication Unit.

FIGURE A-15 (cont'd)

INTERLIBRARY LOAN – XIII

## FORMS

**LC73-121b (Rev 12/73)**

- Attach part F to the duplicated material.
- Return parts D and E to the library Services Unit.

**LC73-121b (Rev 12/73)**

- Send part D to the requesting library.
- File part E, by month.

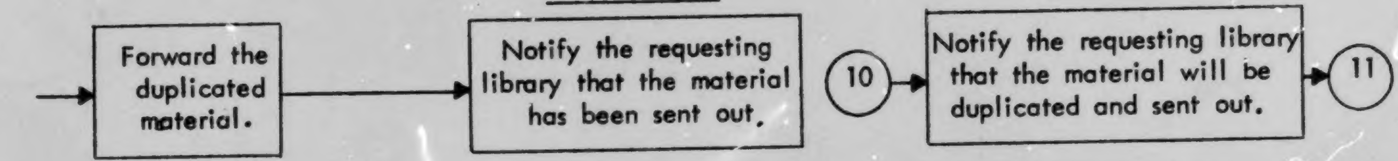
**LC73-121b (Rev 12/73)**

- Mark the date in the taping in process field.
- Send part C to the requesting library.

**LC73-135 (12/73)**

Attach part B to part C of LC73-121b (if applicable).

## PROCEDURES


Forward the duplicated material.
Notify the requesting library that the material has been sent out.
10
Notify the requesting library that the material will be duplicated and sent out.
11

## BOOKS

Send the duplicated material to the library, via the Field Services Section.

FIGURE A-15 (cont'd)

INTERLIBRARY LOAN – XIV

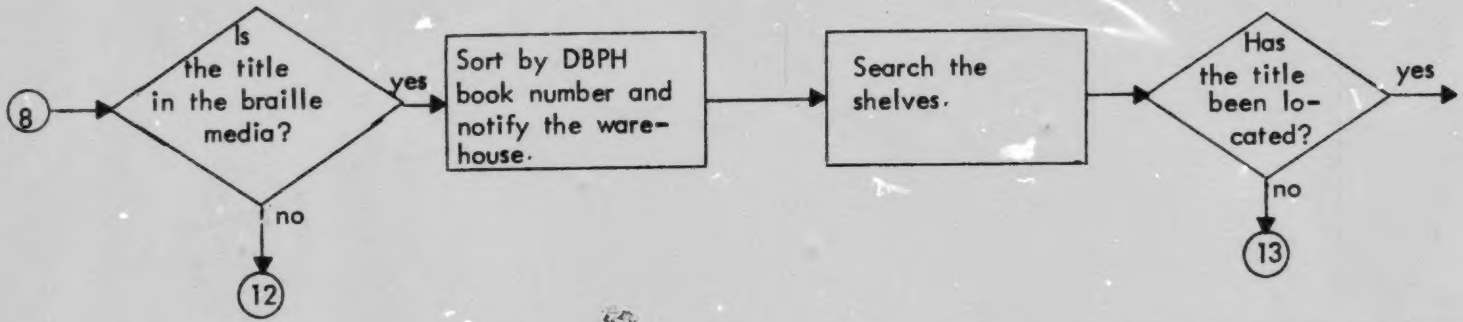
FORMS

LC73-121b (Rev 12/73)

Send to the warehouse.

---

PROCEDURES


8
Is the title in the braille media?
yes
no
12
Sort by DBPH book number and notify the warehouse.
Search the shelves.
Has the title been located?
yes
no
13

---

BOOKS

---

FIGURE A-15 (cont'd)

INTERLIBRARY LOAN - XV

FORMS

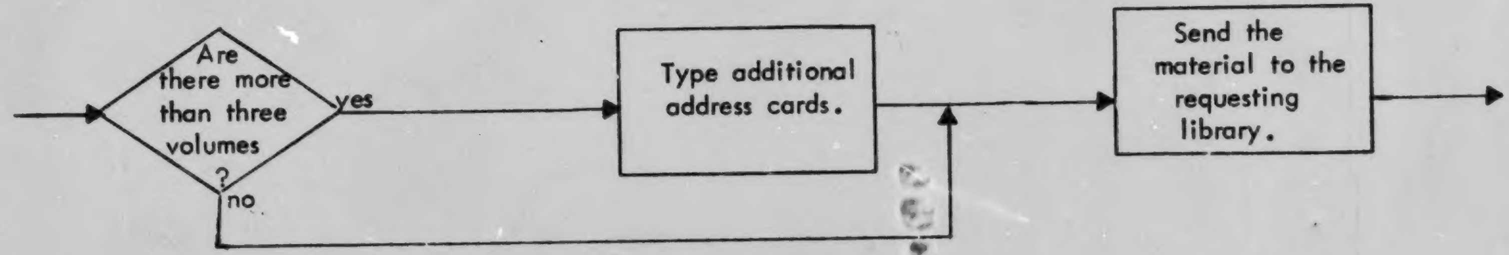
LC73-121b (Rev 12/73)

- Date all parts.
- Attach part F to the material.

Address Cards

Attach to the material (if applicable).

PROCEDURES


Are there more than three volumes ?
yes
no
Type additional address cards.
Send the material to the requesting library.

BOOKS

Forward the material to the requesting library via the Field Services Section.

FIGURE A-15 (cont'd)

INTERLIBRARY LOAN - XVI

## FORMS

LC73-121b (Rev 12/73)

Forward the remaining parts to the Library Services Section.

"BRA" Control Card

Type up the card and file it in the "out" file.

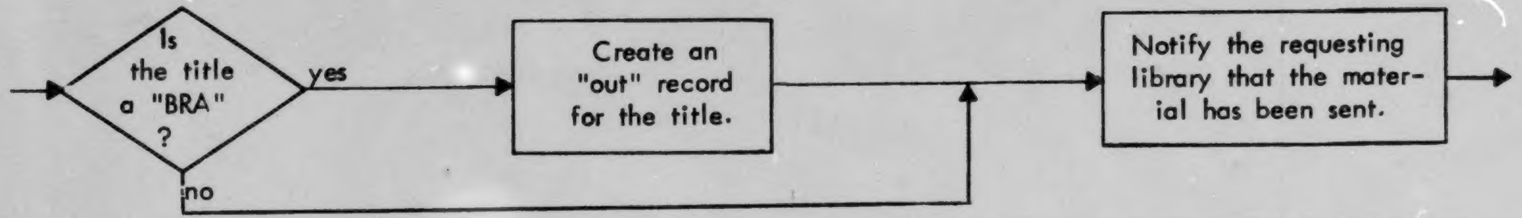
LC73-121b (Rev 12/73)

- Send part C to the requesting library.
- Discard part D.
- File part E by month.

LC73-135 (12/73)

Attach part B to part C of LC-121b (if applicable).

## PROCEDURES


Is the title a "BRA" ?
yes
no
Create an "out" record for the title.
Notify the requesting library that the material has been sent.

## BOOKS

FIGURE A-15 (cont'd)

INTERLIBRARY LOAN – XVII

## FORMS

LC73-121b (Rev 12/73)

Forward remaining parts to the Library Services Section.

LC73-121b (Rev 12/73)

Date all remaining parts

- Send part C to the requesting library.
- Discard parts D,E, and F.

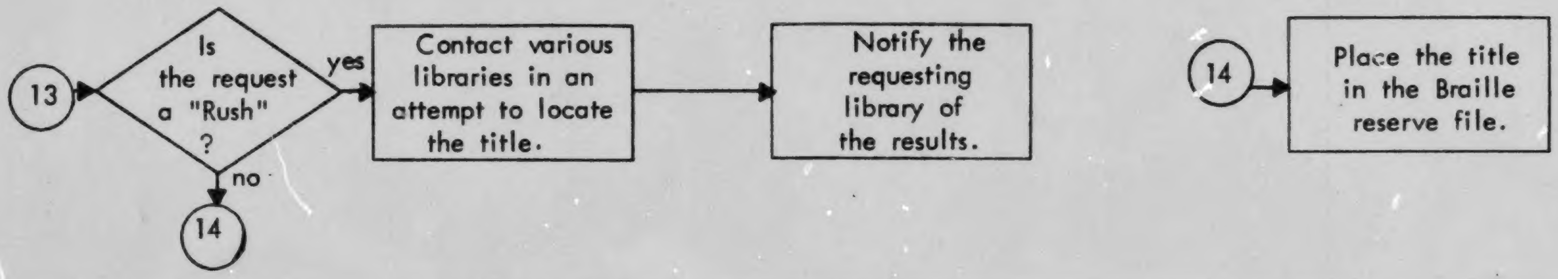
LC73-135 (12/73)

Attach part B to part C of LC73-121b (if applicable).

LC73-121b (Rev 12/73)

- Date all remaining parts.
- File parts D,E, and F in the Braille reserve file.

## PROCEDURES


13
Is the request a "Rush" ?
yes
no
14
Contact various libraries in an attempt to locate the title.
Notify the requesting library of the results.
14
Place the title in the Braille reserve file.

## BOOKS

FIGURE A-15 (cont'd)

INTERLIBRARY LOAN – XVIII

## FORMS

**LC73-121b (Rev 12/73)**

**Send part C to the requesting library.**

**LC73-135 (12/73)**

**Attach part B to part C of LC73-121b (if applicable).**

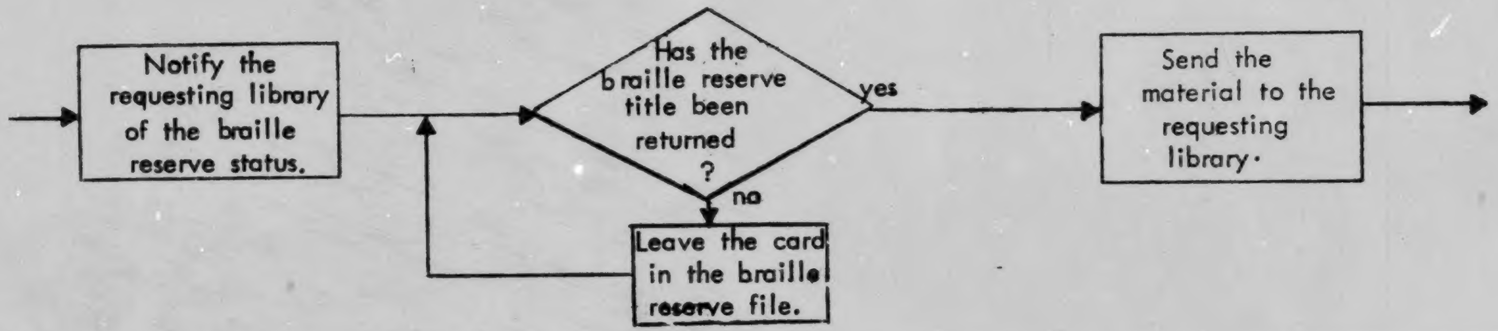
LC73-121b (Rev 12/73)

- Date all parts.
- Attach part F to the material.

**Address Cards**

**Attach to the material (if applicable).**

## PROCEDURES


Notify the requesting library of the braille reserve status.
Has the braille reserve title been returned ?
yes
no
Leave the card in the braille reserve file.
Send the material to the requesting library.

## BOOKS

Forward the material to the requesting library via the Field Services Section.

FIGURE **A-15** (cont'd)

INTERLIBRARY LOAN – **XIX**

## FORMS

**LC73-121b (Rev 12/73)**

Forward the remaining parts to the Library Services Section.

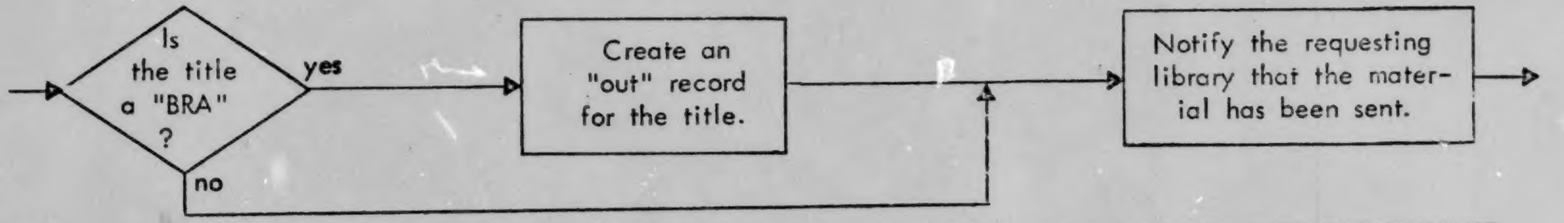
**"BRA" Control Card**

Type up the card and file it in the "out" file.

**LC73-121b (Rev 12/73)**

- Send part **D** to the requesting library.
- **File part E, by month.**

## PROCEDURES


Is the title a "BRA" ?
yes
no
Create an "out" record for the title.
Notify the requesting library that the material has been sent.

## BOOKS

FIGURE **A-15** (cont'd)

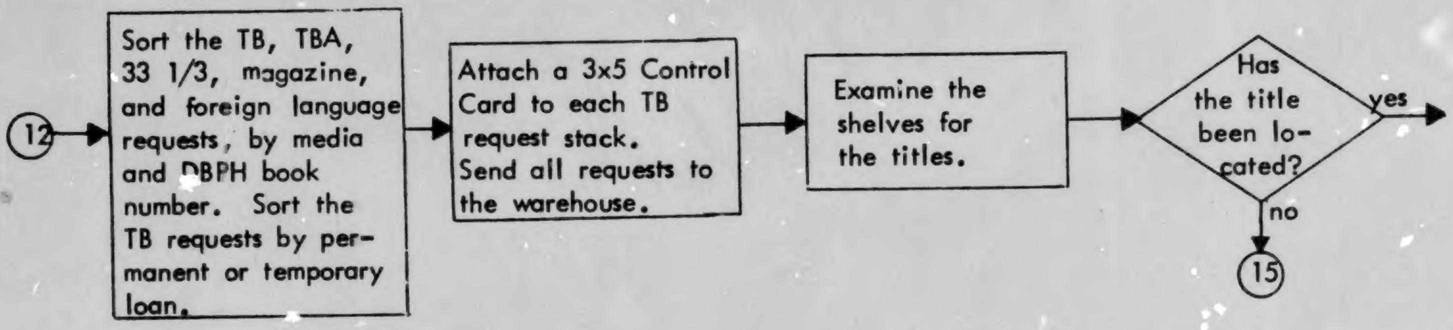
INTERLIBRARY LOAN – XX

## FORMS

3x5 Control Card

Label the Card:
- EXCESS STOCK
  (Permanent loan)
- REGULAR STOCK
  (Temporary loan)

## PROCEDURES


12
Sort the TB, TBA, 33 1/3, magazine, and foreign language requests, by media and DBPH book number. Sort the TB requests by permanent or temporary loan.
Attach a 3x5 Control Card to each TB request stack. Send all requests to the warehouse.
Examine the shelves for the titles.
Has the title been located?
yes
no
15

## BOOKS

FIGURE A-15 (cont'd)

INTERLIBRARY LOAN - XXI

## FORMS

LC73-121b (Rev 12/73)

- Date all remaining parts.
- Attach part F to the material.

LC73-121b (Rev 12/73)

- Send part C to the requesting library.
- Discard part D.
- File part E, by month.

LC73-121b (Rev 12/73)

- Date all copies.
- File parts D, E, and F.
- Send part C to the requesting Library.

LC73-135 (12/73)

- Attach part B to part C of LC73-121b (if applicable).

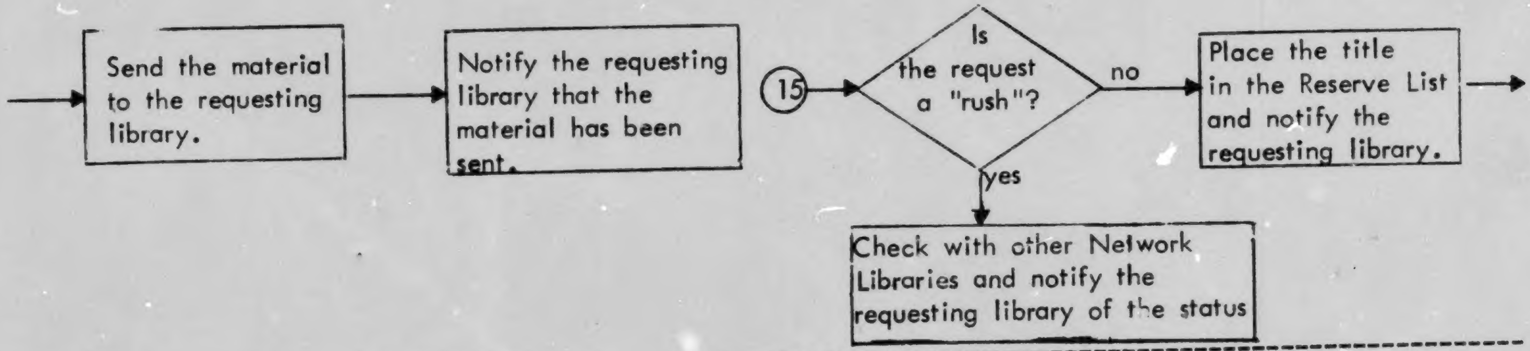
LC73-121b (Rev 12/73)

- Date all copies.
- File parts D, E, and F in the reserve file.
- Send part C to the requesting Library.

LC73-135 (12/73)

- Attach part B to part C of LC73-121b (if applicable).

## PROCEDURES


Send the material to the requesting library.
Notify the requesting library that the material has been sent.
15
Is the request a "rush"?
no
Place the title in the Reserve List and notify the requesting library.
yes
Check with other Network Libraries and notify the requesting library of the status

## BOOKS

Forward the material to the requesting library via the Field Services Section.

FIGURE A-15 (cont'd)

INTERLIBRARY LOAN - XXII

FORMS

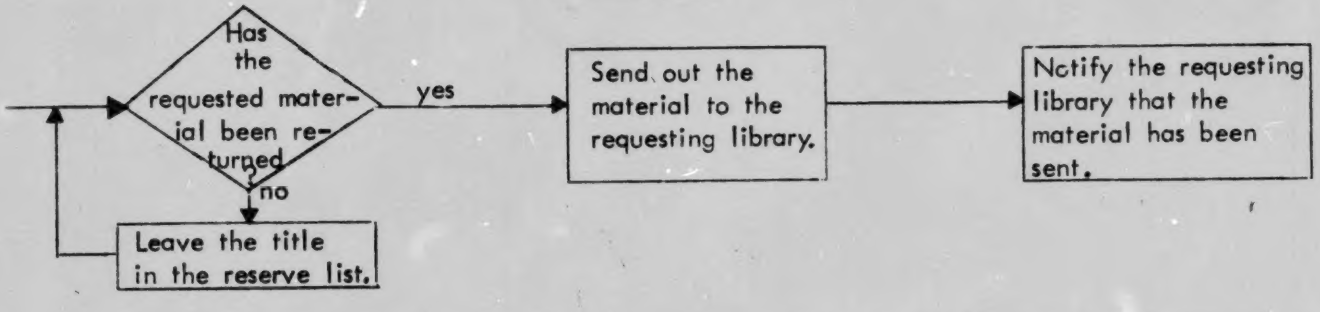
LC73-121b (Rev 12/73)

- Date all remaining parts.

LC73-121b (Rev 12/73)

- Send part D to the requesting library.
- File part E, by month.

PROCEDURES


Has the requested material been returned?
yes
no
Leave the title in the reserve list.
Send out the material to the requesting library.
Notify the requesting library that the material has been sent.

BOOKS

Forward the material to the requesting library via the Field Services Section.

FIGURE A-15 (cont'd)

INTERLIBRARY LOAN - XXIII

## FORMS

LC73-121b (Rev 12/73) or

Receive part b.

LC73-135 (12/73)

Receive the yellow copy (b).

Form Letter

To the requester.

LC73-121b (Rev 12/73)

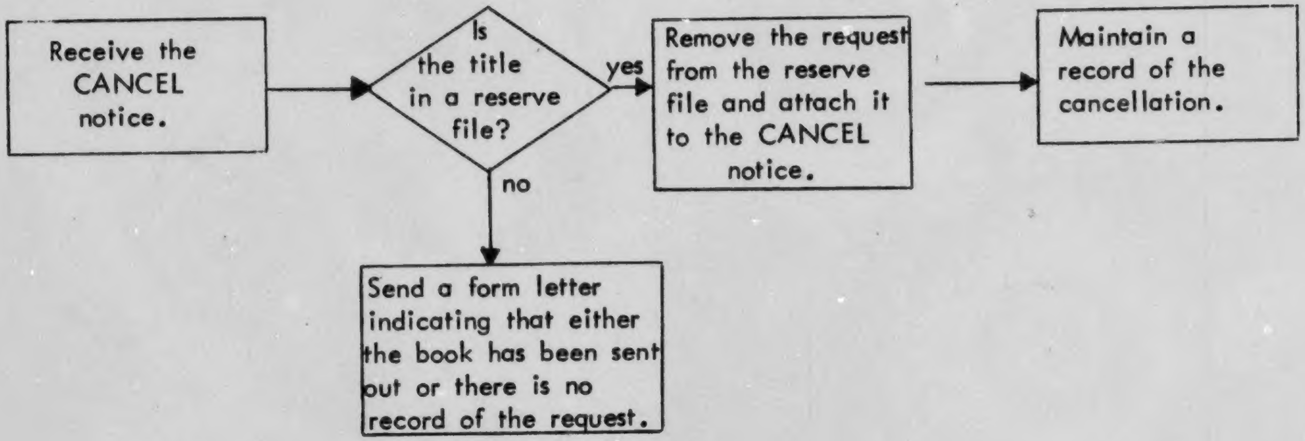
The green copy is attached to the CANCEL notice.

LC73-121b (Rev 12/73)

File the CANCEL notice and the green copy in the cancellation file, by month.

---

## PROCEDURES


Receive the CANCEL notice.
Is the title in a reserve file?
yes
no
Remove the request from the reserve file and attach it to the CANCEL notice.
Maintain a record of the cancellation.
Send a form letter indicating that either the book has been sent out or there is no record of the request.

---

## BOOKS

---

FIGURE A-15 (cont'd)

INTERLIBRARY LOAN (CANCELLATION)

DBPH annually performs a two-phase survey operation to better utilize its material and resources. The regional libraries initially report those titles of which there are a large number of copies on hand. DBPH allocates some of these to its National Collection. The regional libraries are surveyed a second time to determine whether extra copies of available titles are required. Based upon these surveys, a redistribution effort is initiated and coordinated by DBPH, for the network libraries.

In addition to the above effort, DBPH also disseminates a list of book numbers to the network libraries, requesting excess copies of the specified titles, as needed for the National Collection.

FIGURE A-15 (cont'd)

INTERLIBRARY LOAN (EXCESS MATERIAL DISTRIBUTION)

The "Special Services" function concerns the unique situations and requests of the readers served by the network. Currently handled by the Special Services Unit of the Division, this function has three areas of involvement: braille circulation, special requests, and service to U.S. citizens living in foreign countries. Braille books are circulated to the District of Columbia and three states whose Regional Libraries are presently not providing braille service. Hand copied braille is circulated to all states and to U S citizens in foreign countries. The workflow of the final area follows this summary.

Special requests are received from readers: for example, to locate volunteer groups for braille transcribing and to find material that DBPH does not presently have in its National Collection.

FIGURE A-16

SPECIAL SERVICES

## FORMS

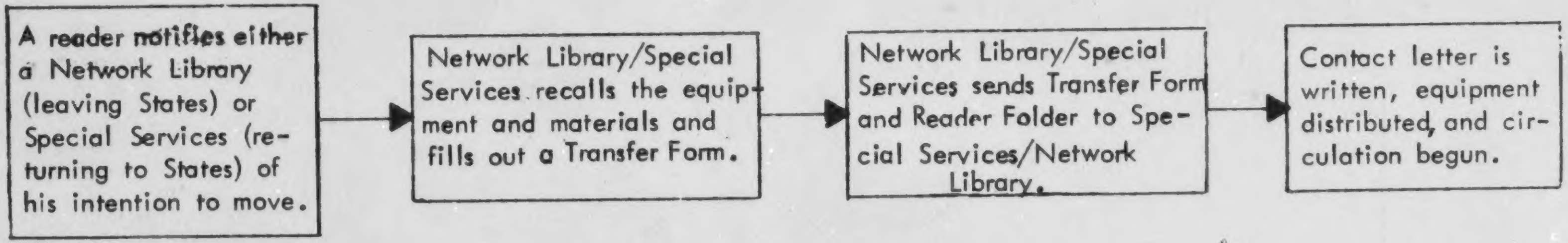
**Letter**
To Special Services
or Network Library

**Transfer Form**
To Special Services
or Network Library

**Transfer Form and**
**Reader Folder**
To Special Services
or Network Library.

**Contact Letter**
To the patron.

## PROCEDURES



A reader notifies either a Network Library (leaving States) or Special Services (returning to States) of his intention to move.

Network Library/Special Services recalls the equipment and materials and fills out a Transfer Form.

Network Library/Special Services sends Transfer Form and Reader Folder to Special Services/Network Library.

Contact letter is written, equipment distributed, and circulation begun.

## BOOKS AND EQUIPMENT

- Recorded Books
- Braille Books
- Talking Book Machine
- Cassette Player
- Accessories

- *Talking Book Topics*
- *Braille Book Review*
- Recorded Books
- Braille Books
- Periodicals
- Talking Book Machine
- Cassette Player
- Accessories

FIGURE A-16 (cont'd)

SPECIAL SERVICES (FOREIGN COUNTRIES)

This function involves the development of standards and guidelines for the growth and maintenance of the library network for the blind and physically handicapped. Aspects of this include determining location for new libraries, establishing and maintaining library policy, and developing new services to be performed by the network.

FIGURE A-17

NETWORK COORDINATION

This function involves the coordination of the various volunteer groups affiliated with the Division. This includes organizing narrators, monitors, reviewers, braillists, and proofreaders, and choosing suitable narrators for particular titles.

FIGURE A-18

VOLUNTEER MOBILIZATION

"Reference" entails the development of the Division's collection of print materials concerning all aspects of blindness and physical handicaps, and the maintenance of the Division archives. The Reference Section is responsible for providing reference services to the DBPH staff, to the DBPH library network and, on a national basis, to the general public, including students, professionals, researchers, and organizations.

Statistics and other program information are collected and disseminated for use by DBPH staff and network participants. Reference circulars, bibliographies, accession lists, and other compilations of reference information, are prepared and distributed to interested individuals and to libraries and related organizations.

FIGURE A-19

REFERENCE

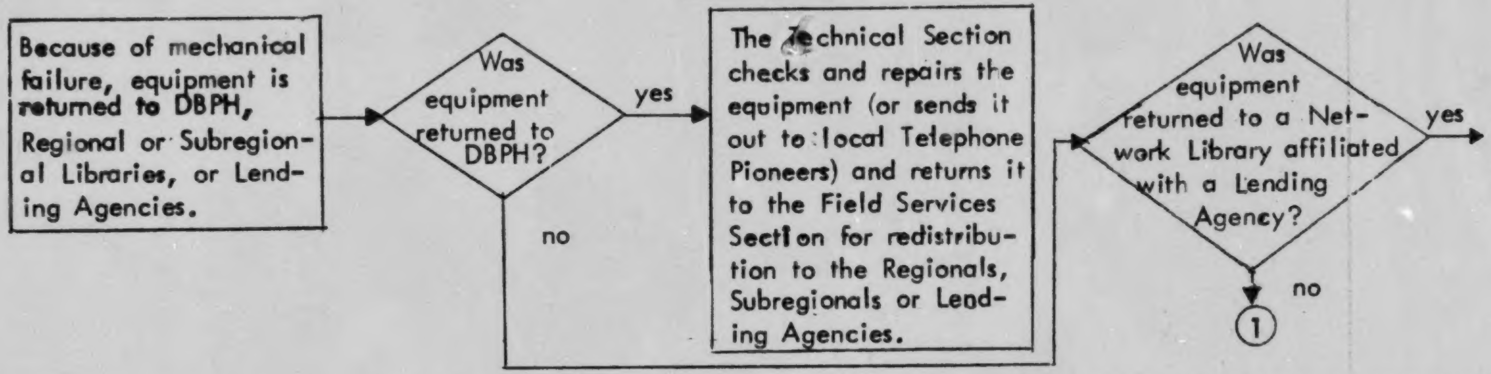
This function is the creation of exhibits and media releases. These promotional materials are designed for use by the general public.

FIGURE A-20

PUBLIC INFORMATION PREPARATION

FORMS

PROCEDURES



Because of mechanical failure, equipment is **returned to DBPH,** Regional or Subregional Libraries, or Lending Agencies.

Was equipment returned to DBPH?

The Technical Section checks and repairs the equipment (or sends it out to local Telephone Pioneers) and returns it to the Field Services Section for redistribution to the Regionals, Subregionals or Lending Agencies.

Was equipment returned to a Network Library affiliated with a Lending Agency?

EQUIPMENT

- Talking Book Machines
- Cassette Players
- Accessories

- Talking Book Machines
- Cassette Players
- Accessories

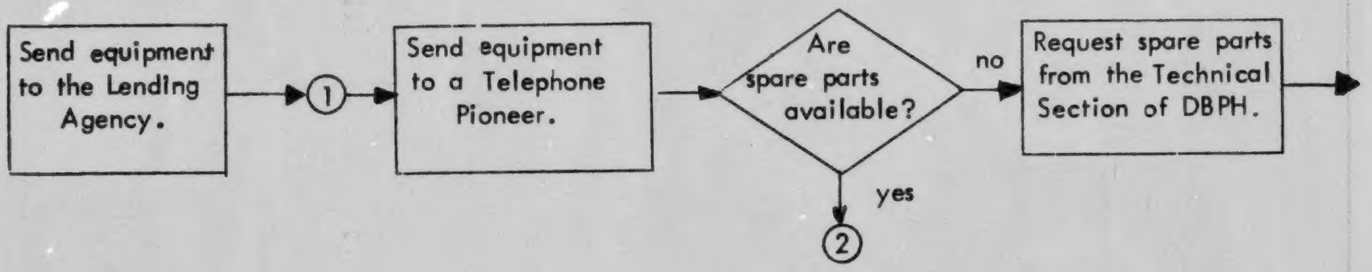
FIGURE A-21

EQUIPMENT MAINTENANCE - I

FORMS

Request Form

PROCEDURES


Send equipment to the Lending Agency.
1
Send equipment to a Telephone Pioneer.
Are spare parts available?
no
yes
2
Request spare parts from the Technical Section of DBPH.

EQUIPMENT

- . Talking Book Machines
- . Cassette Players
- . Accessories

- . Talking Book Machines
- . Cassette Players
- . Accessories

FIGURE A-21 (cont'd)

EQUIPMENT MAINTENANCE - II

FORMS

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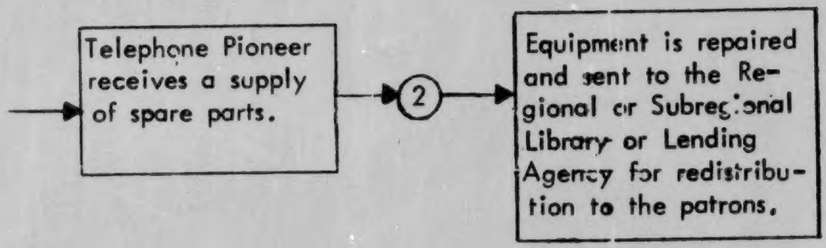
PROCEDURES


Telephone Pioneer receives a supply of spare parts.
2
Equipment is repaired and sent to the Regional or Subregional Library or Lending Agency for redistribution to the patrons.

---

EQUIPMENT

Spare parts from the Technical Section.

- Talking Book Machines
- Cassette Player
- Accessories

---

FIGURE A-21 (cont'd)

EQUIPMENT MAINTENANCE - III

## FORMS

Equipment Distribution Summary

From the manufacturer, DBPH receives information on the volume of equipment sent to each Network Library or Lending Agency, by model.

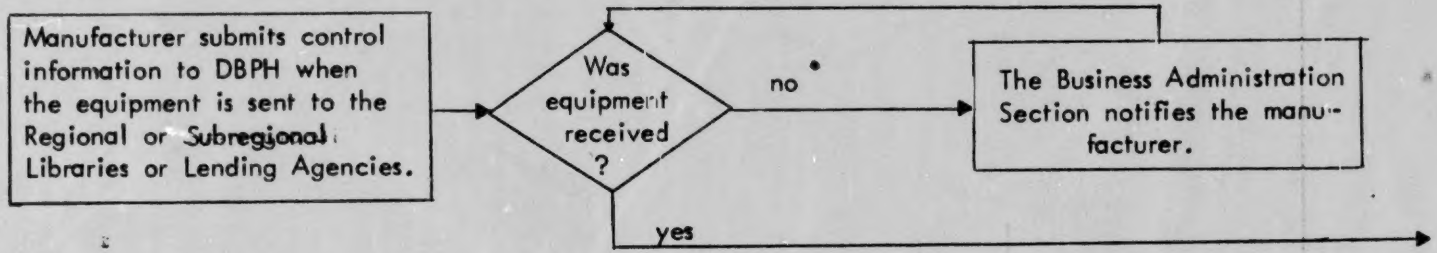
Notice From the Network

This is only sent if the equipment does not arrive.

Invoice From the Manufacturer

Should be received by DBPH from the Network Libraries; contains a list of serial numbers of equipment received by the Library.

## PROCEDURES


Manufacturer submits control information to DBPH when the equipment is sent to the Regional or Subregional Libraries or Lending Agencies.
Was equipment received ?
no
yes
The Business Administration Section notifies the manufacturer.

## EQUIPMENT

- Talking Book Machines
- Cassette Players
- Accessories

- Talking Book Machines
- Cassette Players
- Accessories

FIGURE A-22

EQUIPMENT INVENTORY — I

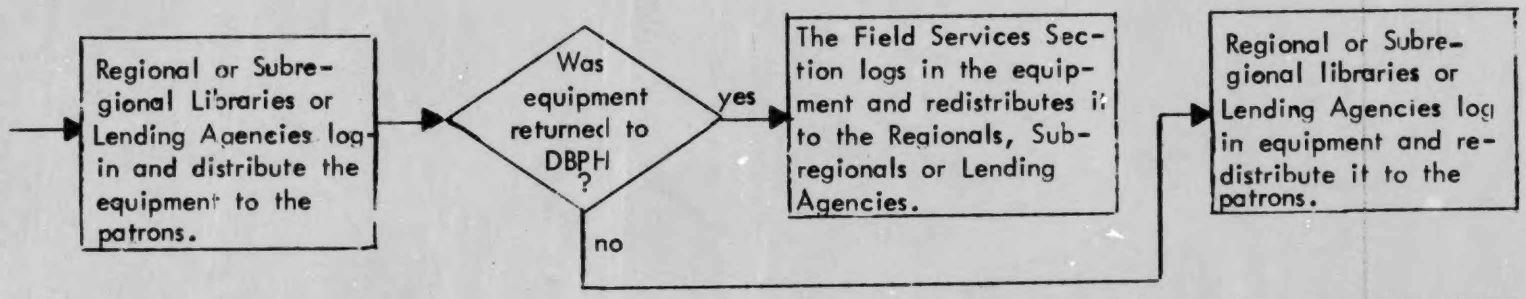
## FORMS

Recorded Data
- Serial Number
- Model Number
- Name of Manufacturer
- Name of Reader
- Address of Reader

Recorded Data
- Serial Number
- Model Number
- Name of Network Library or Lending Agency.

Recorded Data
- Serial Number
- Model Number
- Name of Reader
- Address of Reader

## PROCEDURES


Regional or Subregional Libraries or Lending Agencies log in and distribute the equipment to the patrons.
Was equipment returned to DBPH ?
yes
no
The Field Services Section logs in the equipment and redistributes it to the Regionals, Subregionals or Lending Agencies.
Regional or Subregional libraries or Lending Agencies log in equipment and redistribute it to the patrons.

## EQUIPMENT

- Talking Book Machines
- Cassette Players
- Accessories

- Talking Book Machines
- Cassette Players
- Accessories

- Talking Book Machines
- Cassette Players
- Accessories

FIGURE A-22 (cont'd)

EQUIPMENT INVENTORY - II

There is a continuous research and development effort by the Technical Section of DBPH. Specifications for the production of the equipment (talking book machines, cassette players, accessories, etc.) used by the patrons, are based on this work. Recently, a study was performed to determine future courses of action within this area (Study of Decision Factors in Planning DBPH Audio Services, QEI Report 4131, 1974). During the production process, a sample of the new equipment is obtained and tested for strict quality control. There is a general concern among the staff to provide new equipment to better serve the reader. Current advances in the State-of-the-Art include 8 1/3 RPM talking book machines, and 15/16 ips and four-track cassette players, which allow more information to be stored per record or cassette. This reduces the number of records and cassettes required for a book without drastically altering the quality of the material.

FIGURE A-23

RESEARCH AND DEVELOPMENT

FORMS

Equipment Specifications

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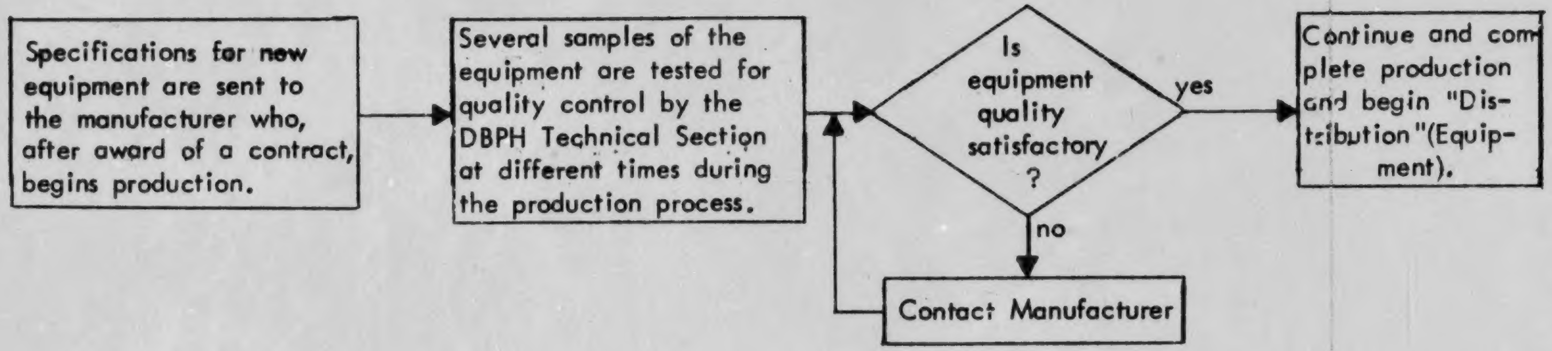
PROCEDURES


Specifications for new equipment are sent to the manufacturer who, after award of a contract, begins production.
Several samples of the equipment are tested for quality control by the DBPH Technical Section at different times during the production process.
Is equipment quality satisfactory ?
yes
no
Continue and complete production and begin "Distribution"(Equipment).
Contact Manufacturer

---

EQUIPMENT

- Talking Book Machines
- Cassette Players
- Accessories

- Talking Book Machines
- Cassette Players
- Accessories

- Talking Book Machines
- Cassette Players
- Accessories

---

FIGURE A-24

EQUIPMENT PRODUCTION

# APPENDIX B

## STRUCTURED INTERVIEW SHEET

Appendix B shows the structured interview sheet used during site visits. The structured interview was designed to ensure that the same data would be collected in all the libraries visited and also, to make certain that all the areas of interest were covered within the time available. Responses were recorded on the sheets as well as on tape recorders.

DIVISION FOR THE BLIND AND PHYSICALLY HANDICAPPED

THE LIBRARY OF CONGRESS

WASHINGTON, D.C. 20542

## STRUCTURED INTERVIEW SHEET

REFERENCE DEPARTMENT

1291 TAYLOR STREET NW.
AREA CODE 202-882-5500

Date: ________ Location: ______________

Principal Contact: ______________________ Telephone No. ______________

Participants: ______________________________________________

Interviewer: ______________________________________________

### I. ACQUISITIONS

#### A. General

1) What is your acquisition quota for 1974?

|  |  |  |
|---|---|---|
| ____ Cassette | ____ Reel to Reel | ____ Braille |
| ____ Large Type/Print | ____ Hard Disc | ____ Flexible Disc |

2) From what sources do you receive your books and magazines?

Books: ☐ DBPH ☐ In-house Volunteers ☐ Outside Volunteers
☐ Commercial ☐ Other (please specify) ______________

Periodicals: ☐ DBPH ☐ In-house Volunteers ☐ Outside Volunteers
☐ Commercial ☐ Other (please specify) ______________

3) What factors do you consider in selecting additional titles for your collection other than those mass-produced by DBPH?

☐ Reader Request ☐ DBPH Publications ☐ Other Catalogs
☐ Local Interest ☐ Gaps in Existing Collections
☐ Other (please specify) ______________

4) What media do you get from each source?

|  |  |  |  |
|---|---|---|---|
| DBPH: | ☐ Cassette | ☐ Reel to Reel | ☐ Braille |
|  | ☐ Large Type/Print | ☐ Hard Disc | ☐ Flexible Disc |
| In-house Volunteers: | ☐ Cassette | ☐ Reel to Reel | ☐ Braille |
|  | ☐ Large Type/Print | ☐ Hard Disc | ☐ Flexible Disc |
| Outside Volunteers: | ☐ Cassette | ☐ Reel to Reel | ☐ Braille |
|  | ☐ Large Type/Print | ☐ Hard Disc | ☐ Flexible Disc |
| Commercial: | ☐ Cassette | ☐ Reel to Reel | ☐ Braille |
|  | ☐ Large Type/Print | ☐ Hard Disc | ☐ Flexible Disc |

B. DBPH

1) Do you consistently receive the number of copies from DBPH indicated in their quota?

☐ Cassette ☐ Braille ☐ Hard Disc ☐ Flexible Disc

2) Is there a delay between the time the first copies of a book arrive and the time when the last copies arrive? ____________________
How long? ____________________

3) Approximately how many titles a year do you recommend for inclusion in the DBPH collection? ____________________

a) Who does this?

☐ Librarian with Academic Degree ☐ Librarian trained in-house
☐ Technician ☐ Clerk

b) What response do you get from DBPH (forms, acknowledgements, status reports, etc..)? ____________________
____________________

c) What response would you like to get? ____________________
____________________

4) What % of your acquisitions is DBPH-produced material? __________

C. In-house Volunteers (if applicable)

1) What factors do you consider in selecting a title to be produced by your in-house production staff? ____________________
____________________

2) Do you have production capability for more than one medium? ______
How do you decide which medium to use? ____________________
____________________

3) Do you keep masters of material produced by your in-house volunteers?
__________ If not, where are they kept? ____________________

4) Do you add all in-house produced material to your circulating collection? __________ If not, what criteria are used to make this decision? ____________________
____________________

5) How do you obtain copyright clearance for in-house productions?
____________________
What form is used? ____________________
If the item will not circulate, is this indicated on the form? __________

6) What standards do you use in accepting volunteer-produced material in relation to quality and coverage?

Quality ________________

Coverage ________________

D. Outside Volunteer Groups (if applicable)

1) When do you assign a title to be produced by an outside group?

________________

2) What media are produced?

☐ Cassette ☐ Reel to Reel ☐ Braille

☐ Large type print ☐ Hard Disc ☐ Flexible Disc

Why is a certain medium chosen? ________________

________________

3) Do you add all materials produced for you by outside groups to your circulating collection? ________

If not, what criteria are used to make this decision? ________

________________

4) How do you obtain copyright clearance for such a production? ________

________________

What forms are used? ________________

Does the outside group obtain direct clearance? ________

If an item does not circulate, is this indicated on the form? ________

5) What standards do you use in accepting volunteer-produced material in relation to quality and coverage?

Quality ________________

Coverage ________________

6) Do you ever add unsolicited material to your collection? ________

E. Commercial

1) Do you buy commercially produced material? ________

If so, what media and how many titles:

| | | |
|---|---|---|
| Cassette | ________ | # of titles |
| Reel to Reel | ________ | # of titles |
| Braille | ________ | # of titles |
| Large Type/Print | ________ | # of titles |
| Hard Disc | ________ | # of titles |
| Flexible Disc | ________ | # of titles |

2) What % of your acquisitions budget goes for this? ________

F. Other

1) Do you receive any material from any other sources? ____________
If so, please specify ______________________________________

G. Bibliographic Control

1) For which of the following do you maintain a bibliographic record of each title acquired?

| | | | |
|---|---|---|---|
| DBPH: | ☐ Cassette | ☐ Reel to Reel | ☐ Braille |
| | | ☐ Hard Disc | ☐ Flexible Disc |
| In-house Volunteers: | ☐ Cassette | ☐ Reel to Reel | ☐ Braille |
| | ☐ Large Type/Print | ☐ Hard Disc | ☐ Flexible Disc |
| Outside Volunteers: | ☐ Cassette | ☐ Reel to Reel | ☐ Braille |
| | ☐ Large Type/Print | ☐ Hard Disc | ☐ Flexible Disc |
| Commercial: | ☐ Cassette | ☐ Reel to Reel | ☐ Braille |
| | ☐ Large Type/Print | ☐ Hard Disc | ☐ Flexible Disc |

2) Who prepares this record?

| | | | |
|---|---|---|---|
| Cassette | ☐ Library | ☐ Volunteer Agency | ☐ Jobber |
| Reel to Reel | ☐ Library | ☐ Volunteer Agency | ☐ Jobber |
| Braille | ☐ Library | ☐ Volunteer Agency | ☐ Jobber |
| Large Type/Print | ☐ Library | ☐ Volunteer Agency | ☐ Jobber |
| Hard Disc | ☐ Library | ☐ Volunteer Agency | ☐ Jobber |
| Flexible Disc | ☐ Library | ☐ Volunteer Agency | ☐ Jobber |

H. Comments

______________________________________________

______________________________________________

______________________________________________

______________________________________________

______________________________________________

______________________________________________

______________________________________________

______________________________________________

______________________________________________

______________________________________________

DIVISION FOR THE BLIND AND PHYSICALLY HANDICAPPED

THE LIBRARY OF CONGRESS

WASHINGTON, D.C. 20542

## STRUCTURED INTERVIEW SHEET

REFERENCE DEPARTMENT

1291 TAYLOR STREET NW.
AREA CODE 202-882-5500

Date: ________ Location: ________________

Principal Contact: ____________________________ Telephone No. ______________

Participants: ________________________________________________

Interviewer: ________________________________________________

## II. PROCESSING

### A. General

1) What standards do you use for cataloging?
☐ AACR ☐ Other (please specify) ____________________

2) Is your cataloging done in the regional library, by an organization of which the library is part, or by an outside organization? ______________
________________________________________________

3) What cataloging capability do you have in-house?
☐ Catalogers trained in school ☐ Catalogers trained on job
☐ No catalogers

4) What review or proofreading procedures do you use? ______________
________________________________________________

5) How are your bibliographic entries stored?
☐ Card Catalog ☐ Printed (bound) Catalog
☐ Magnetic Tape (Is this in MARC format? ______)
☐ Other (please specify) ____________________

### B. DBPH Material

1) Do the catalog cards from DBPH arrive before, after, or with the books? ________________________________

2) Is there any bibliographic information you need that does not appear on these cards? ______________________________
How do you get this information? ______________________________
________________________________________________
What changes would you recommend for DBPH cards? ______________
________________________________________________

C. Locally Produced Items in your Collection

1) Do you catalog the volunteer-produced items in your collection? ____
If so, what information do you include on these cards? ____

D. Other Collections

1) Do you maintain catalogs of material produced by volunteers for any organization other than your library? ____
(please specify) ____
If so, do you have physical control of this material? ____
How? ____

E. Comments

DIVISION FOR THE BLIND AND PHYSICALLY HANDICAPPED

THE LIBRARY OF CONGRESS

WASHINGTON, D.C. 20542

## STRUCTURED INTERVIEW SHEET

REFERENCE DEPARTMENT

1291 TAYLOR STREET NW.
AREA CODE 202-882-5500

Date: __________ Location: ______________

Principal Contact: ____________________ Telephone No. ____________

Participants: ____________________________________________

Interviewer: ____________________________________________

## III. CIRCULATION

### A. General

1) Walk through the circulation procedures used for ☐ books and/or ☐ periodicals for each of the following media:

☐ Cassette
☐ Large Type/Print
☐ Reel to Reel
☐ Hard Disc
☐ Braille
☐ Flexible Disc

A rough chart will be prepared by SAI on site.

### B. Reader Records

1) Do you keep a reader profile? ______________________
If so, does it include:

☐ Personal Data (Age, Social Security Number, Religion, Race, etc.) (please specify) ______________________

☐ Equipment (please specify) ______________________
☐ General Interests (please specify) ______________________
☐ Record of Activity (what has been read, what is being read, specific requests for the future, etc.) (please specify) ______________________

2) How do you organize and store this material?
______________________________________________

3) Do you have separate files for each medium used? ____________

4) How do you handle records for problem readers, heavy readers and other special groups? ______________________
______________________________________________
______________________________________________

5) Do you maintain a separate mailing list? ________ If so, please specify. ______________________

### C. Method of Circulation

1) What circulation method do you use?

☐ Turnabout (book in/book out) ☐ Calendar (weekly, monthly, etc.)
☐ Requests only ☐ Combinations of these
☐ Other (please specify) ____________________

2) Do you deviate from your circulation method for special groups? ______
If so, under what circumstances and how? ____________________
____________________

### D. Requests

1) What types of requests do you receive?

☐ by Author ☐ by Subject ☐ by Title ☐ by Narrator
☐ Other (please specify) ____________________

Rank in order of frequency.

### E. Special Situations

1) Do you always send reminders to readers to return material after a certain period of time? ________ How long is this period? ____________
Under what circumstances? ____________________
☐ If the title is in heavy demand
☐ Upon a specific request for the book
☐ Other (please specify) ____________________

2) Do you solicit a new list of requests if the reader's present list is getting low? ____________________

3) What special attention is given to problem readers, heavy readers, etc.?
____________________

### F. Reserves

1) Do you keep reserve lists for any of the following media?

☐ Cassette ☐ Reel to Reel ☐ Braille
☐ Large Type/Print ☐ Hard Disc ☐ Flexible Disc

2) If so, how are these lists kept? ____________________
____________________

What information appears on them? ____________________
____________________

3) Do you use them to generate inter-library loan requests? __________

G. Inter-library Loan

1) Outline your procedure for inter-library loans

2) What organizations do you contact?

3) In what order?

4) Do you ever go outside the network for inter-library loans?
How?

H. Comments

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WASHINGTON, D.C. 20542

## STRUCTURED INTERVIEW SHEET

REFERENCE DEPARTMENT

1291 TAYLOR STREET NW.
AREA CODE 202-882-5500

Date: __________ Location: __________

Principal Contact: __________

Participants: __________

Interviewer: __________

### IV. ABOUT YOUR SUBREGIONALS

1. Do you have subregionals? __________ How many? __________
   How many readers each? __________

2. Does any subregional perform any functions for blind and physically handicapped readers other than their own? __________

   What reporting do they give you concerning this? __________

3. Does your catalog reflect subregional collections? _____ Completely? _____

4. Comments

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THE LIBRARY OF CONGRESS

WASHINGTON, D.C. 20542

REFERENCE DEPARTMENT

1291 TAYLOR STREET NW.
AREA CODE 202-882-5500

## STRUCTURED INTERVIEW SHEET

Date: ________ Location: ________________

Principal Contact: ____________________________ Telephone No. ____________

Participants: ________________________________________________

Interviewer: ________________________________________________

## V. QUESTIONS FOR SUBREGIONAL REPRESENTATIVES

1. Is there anything in your collection which is not reflected in the Regional's Catalog? ________ in the Union Catalog? ____________
2. Are your circulation procedures different from those presented by the Regional Library? ________ If so, in what way? ________________
3. What direct interaction does the Regional Library have with your readership? ________________________________
4. What direct interaction do you have with DBPH? ________________
5. What information do you report to the Regionals concerning (a) inventory control, (b) bibliographic control, (c) interlibrary loan?
6. How do you report this data? ________________________
7. Comments

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REFERENCE DEPARTMENT

1291 TAYLOR STREET NW.
AREA CODE 202-882-5500

## STRUCTURED INTERVIEW SHEET

Date: ________ Location: ______________
Principal Contact: ______________________ Telephone No. ____________
Participants: ____________________________________
Interviewer: ____________________________________

### VI. UNION CATALOG

1. Do you report the bibliographic information concerning your local collection to the Union Catalog at DBPH? __________
   What forms do you use? ______________________________
2. Are all titles reported? ______
   If not, which types are not? ______________________________
3. Do you indicate whether copyright has been cleared? __________
4. When do you report bibliographic information to the Union Catalog?
   ☐ at point of selection ☐ upon completion of production
   ☐ other (please specify) ______________________
5. Do you report something as withdrawn? ______________
   Do you indicate why (non-return, damage, weeding)? __________
   Do you withdraw materials temporarily? ______________
6. What bibliographic information would you like to see in the Union Catalog? ☐ title ☐ author ☐ subject heading ☐ LC number ☐ annotation ☐ imprint ☐ DBPH number ☐ content notes ☐ collation ☐ narrator ☐ producing agency ☐ reissues ☐ Dewey no. ☐ lending policy ☐ other (please specify) ______________
7. By what data elements do you want to organize the Union Catalog? ____
   ______________________________________________
8. How would you like to access the information in the Union Catalog once it is automated? (media and search keys to be used) ________
   ______________________________________________
9. Comments ______________________________________
   ______________________________________________

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THE LIBRARY OF CONGRESS

WASHINGTON, D.C. 20542

## STRUCTURED INTERVIEW SHEET

REFERENCE DEPARTMENT

1291 TAYLOR STREET NW.
AREA CODE 202-882-5500

Date: ________ Location: ________________

Principal Contact: ______________________ Telephone No. ____________

Participants: ____________________________________________

Interviewer: ____________________________________________

## VII. LIBRARY AUTOMATION — PRESENT AND FUTURE

### A. Present System

1) Are any library functions automated? ______ If yes, please describe:

- (a) applications ____________________
- (b) hardware ____________________
- (c) software ____________________
- (d) telecommunications (TWX, MTST with dial-up capability, etc.) ____________________
- (e) data base name and record layout ____________________
- (f) Are there records in MARC format? ______ What are they? ____________________
- (g) conversion method (keypunch, OCR, etc.) ____________________
- (h) data capture method (worksheets, forms, badges, etc.) ____________________
- (i) support: ☐ in-house systems staff ☐ programmers (in-house) ☐ other (please specify) ____________________
- (j) staff or programmers available from a larger or sister organization called: ____________________
- (k) size of budget for automation: staff ____ % equipment ____ % development ____________ operation ____________
- (l) specific problems in automation, if any ____________________
- (m) What is your implementation schedule (planned and actual)? ____________________

2) What services can DBPH provide to supplement or replace the present in-house system? ____________________

3) What types of output do you think should be made available to DBPH? ______

How can you provide each type of output? (media, frequency and coverage) ______

4) What type of input do you need from DBPH? ______

How do you want to receive the information? (media, frequency and coverage) ______

B. Future System

1) Are there any specific plans for automation in the future? ______

Application ______
Implementation Schedule ______
Budget ______

2) What services can DBPH provide to supplement or replace what is now being planned or considered as a part of the automation program?

3) How do you plan to interface with the DBPH automation program? ______

4) How do you plan to acquire the facility needed to support the automation activities? ______

C. Comments

## APPENDIX C

## NETWORK FUNCTIONAL FLOWS

The following flow charts represent a generalized pattern of activities in a regional library.

They are not to be taken as a model for regional/subregional library development nor do they depict specific procedures for each regional/subregional library. It is expected that each library would differ in detail from the pattern described.

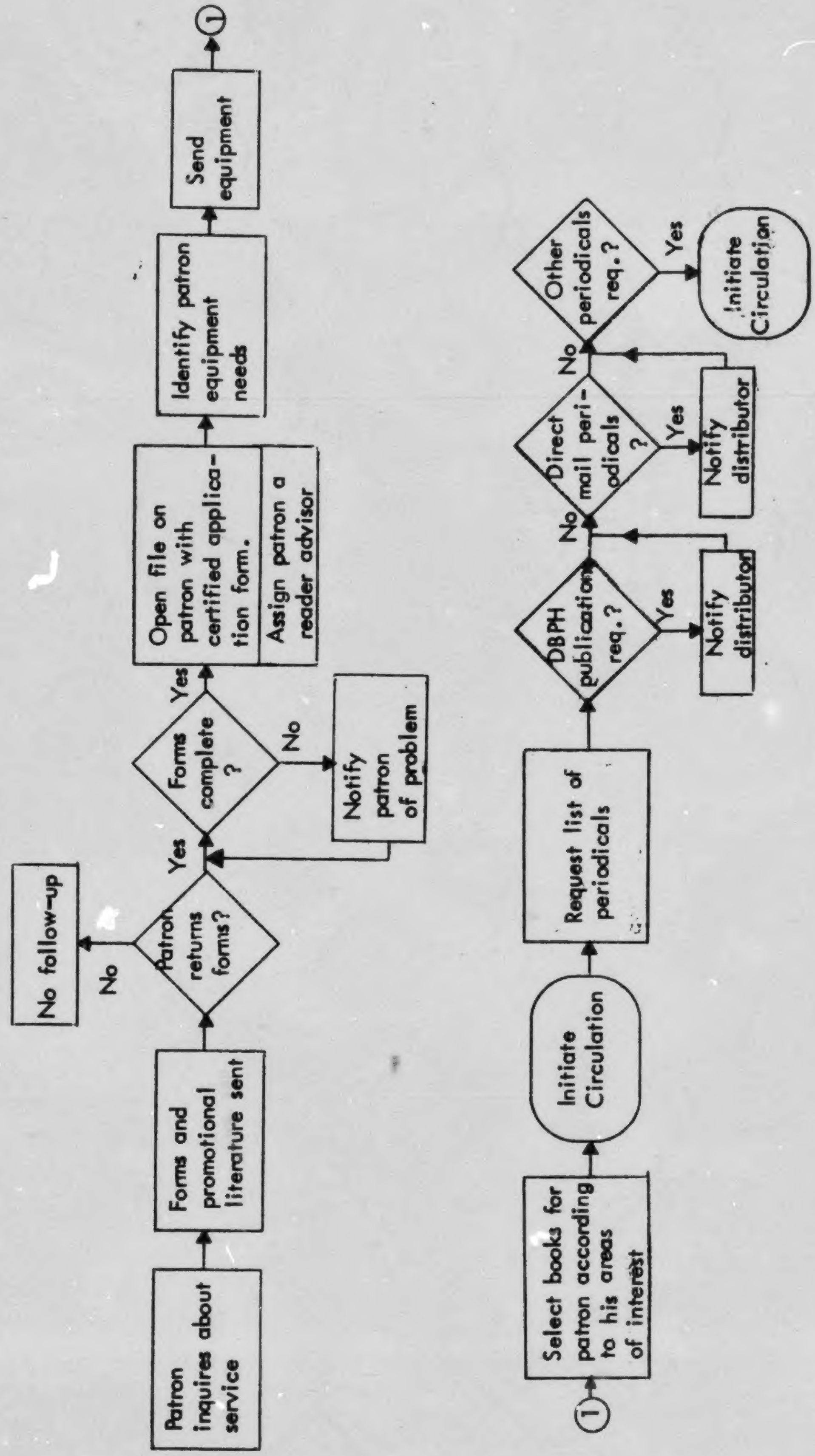
Patron inquires about service
Forms and promotional literature sent
Patron returns forms?
No
No follow-up
Yes
Forms complete ?
No
Notify patron of problem
Yes
Open file on patron with certified application form.
Assign patron a reader advisor
Identify patron equipment needs
Send equipment
1
1
Select books for patron according to his areas of interest
Initiate Circulation
Request list of periodicals
DBPH publications req. ?
Yes
Notify distributor
No
Direct mail periodicals ?
Yes
Notify distributor
No
Other periodicals req. ?
Yes
Initiate Circulation

FIGURE C-1

PATRON REGISTRATION

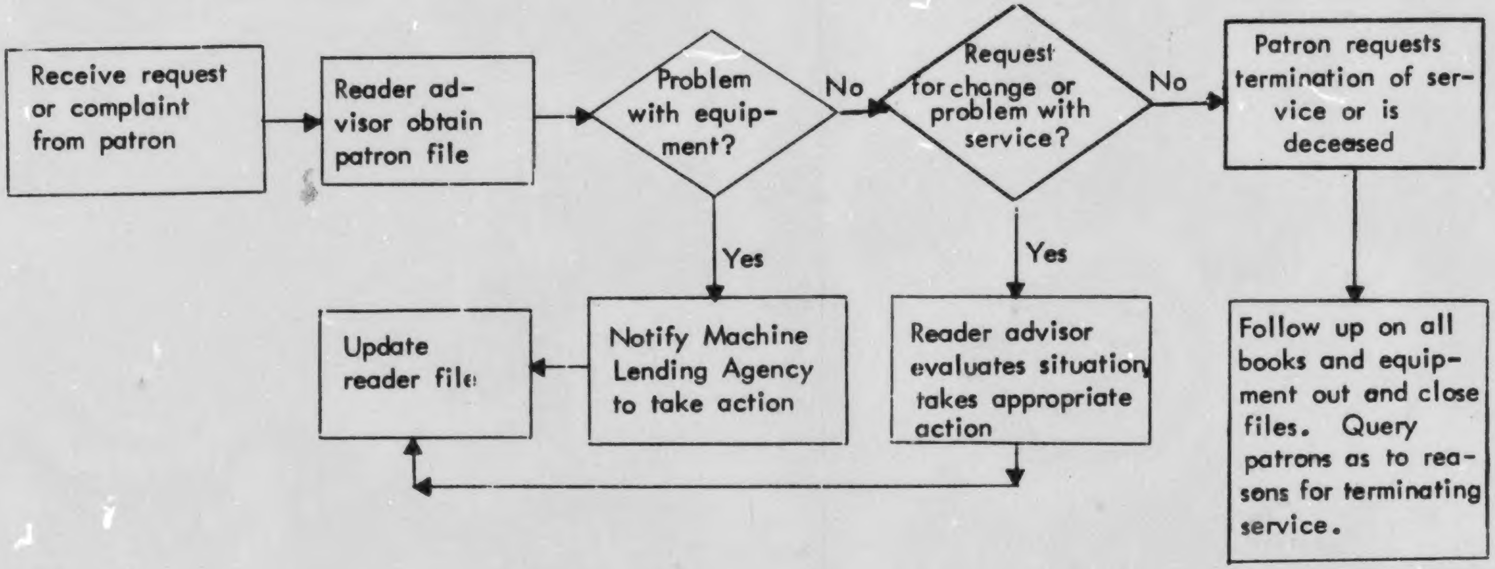
Receive request or complaint from patron
Reader advisor obtain patron file
Problem with equipment?
No
Request for change or problem with service?
No
Patron requests termination of service or is deceased
Yes
Yes
Update reader file
Notify Machine Lending Agency to take action
Reader advisor evaluates situation takes appropriate action
Follow up on all books and equipment out and close files. Query patrons as to reasons for terminating service.

FIGURE C-2

PATRON ASSISTANCE

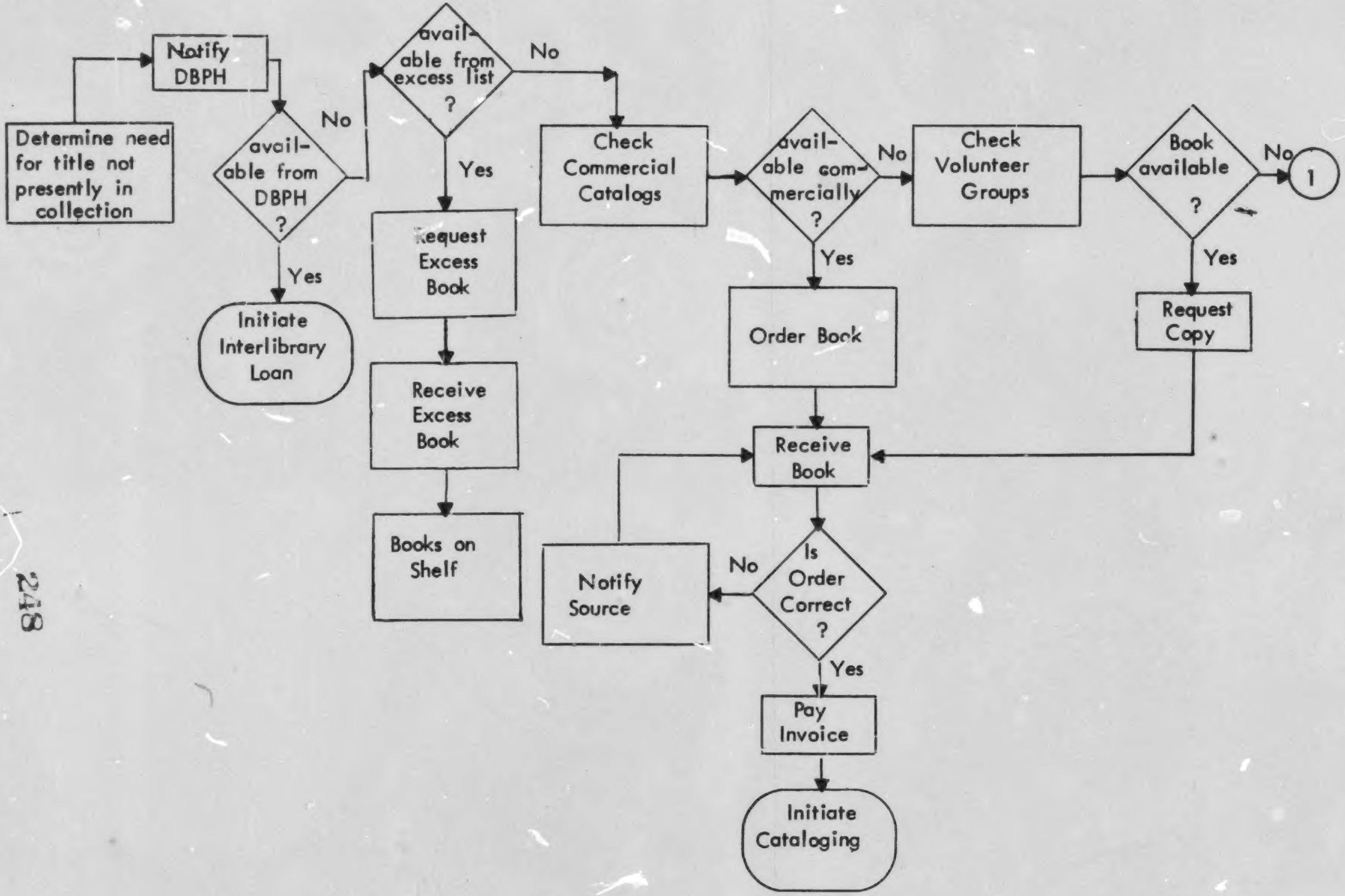

FIGURE C-3

SOLICITED ACQUISITION

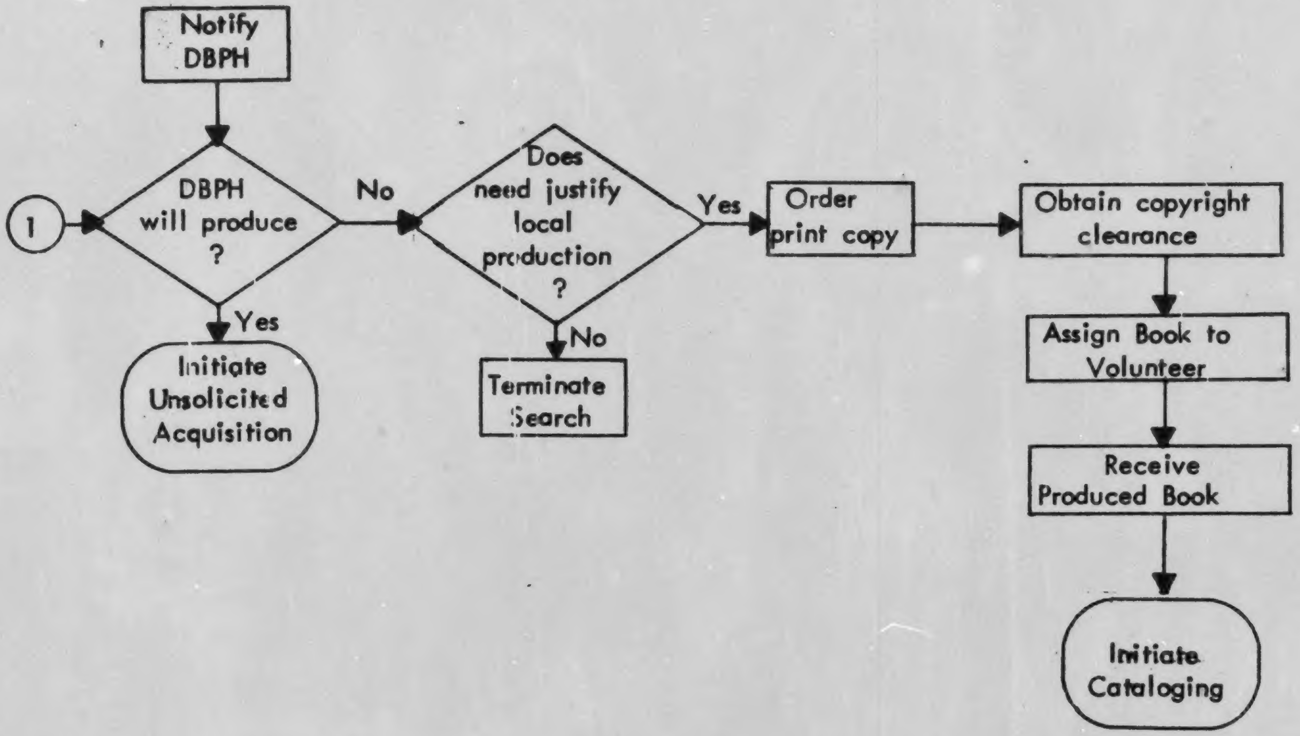

FIGURE C-3 (cont'd)

SOLICITED ACQUISITION

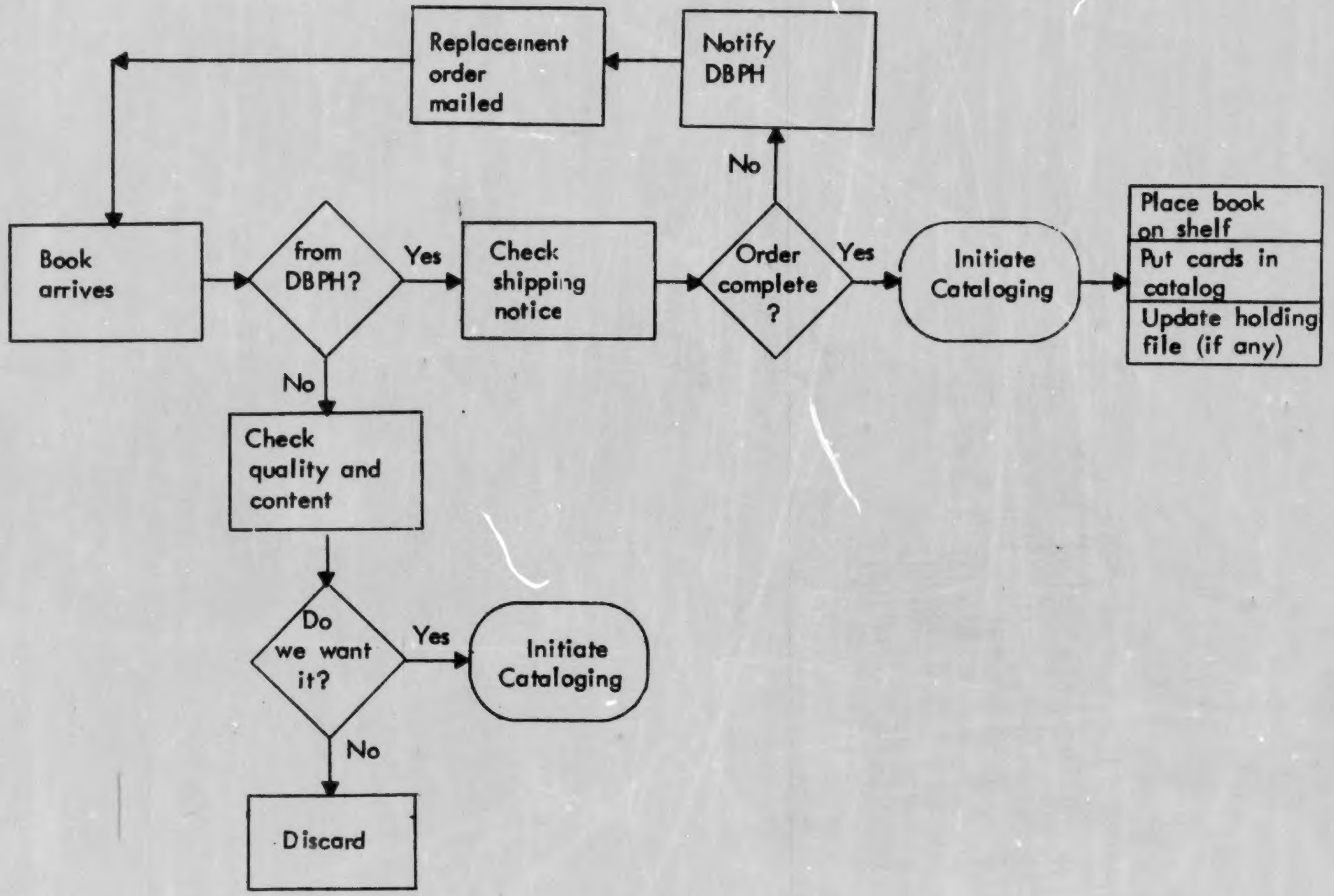

FIGURE C-4

UNSOLICITED ACQUISITION

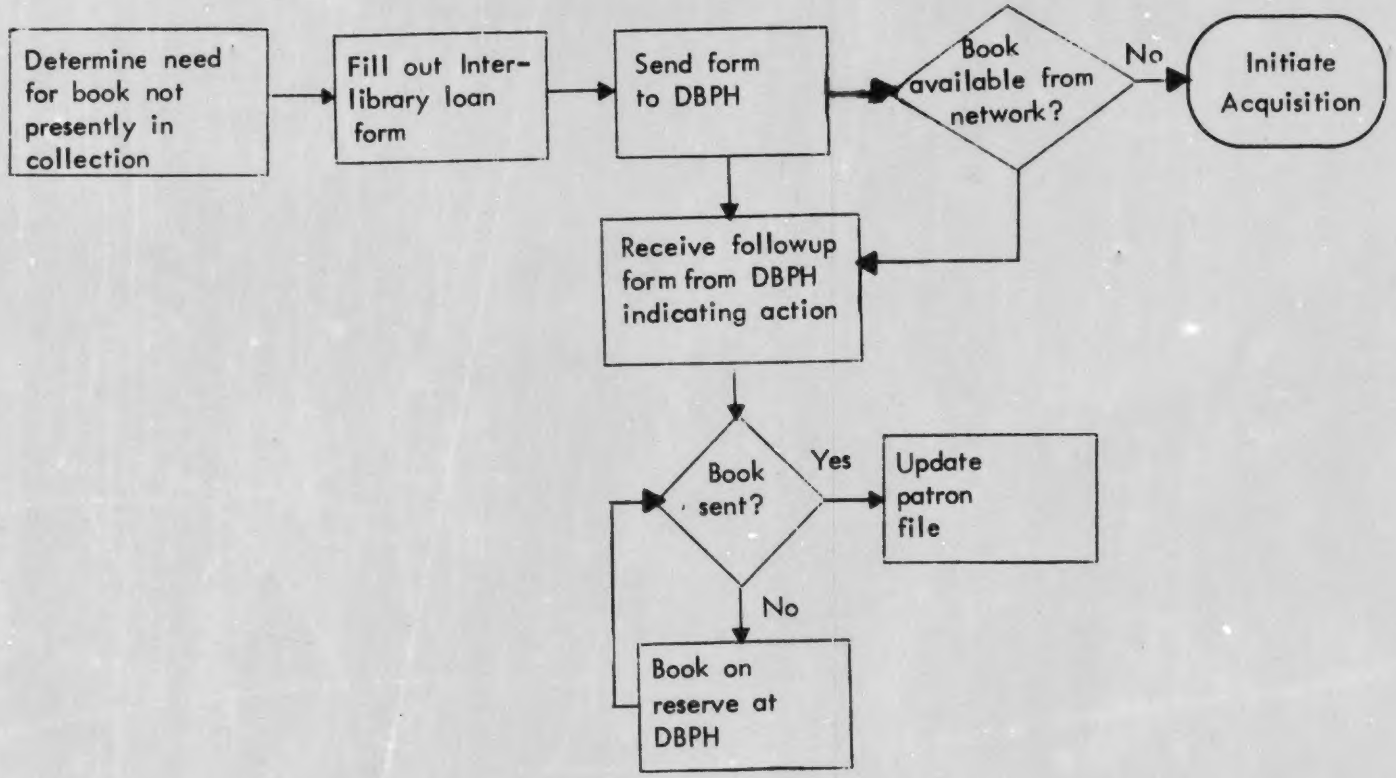
Determine need for book not presently in collection
Fill out Interlibrary loan form
Send form to DBPH
Book available from network?
No
Initiate Acquisition
Receive followup form from DBPH indicating action
Book sent?
Yes
Update patron file
No
Book on reserve at DBPH

FIGURE C-5

INTERLIBRARY LOAN

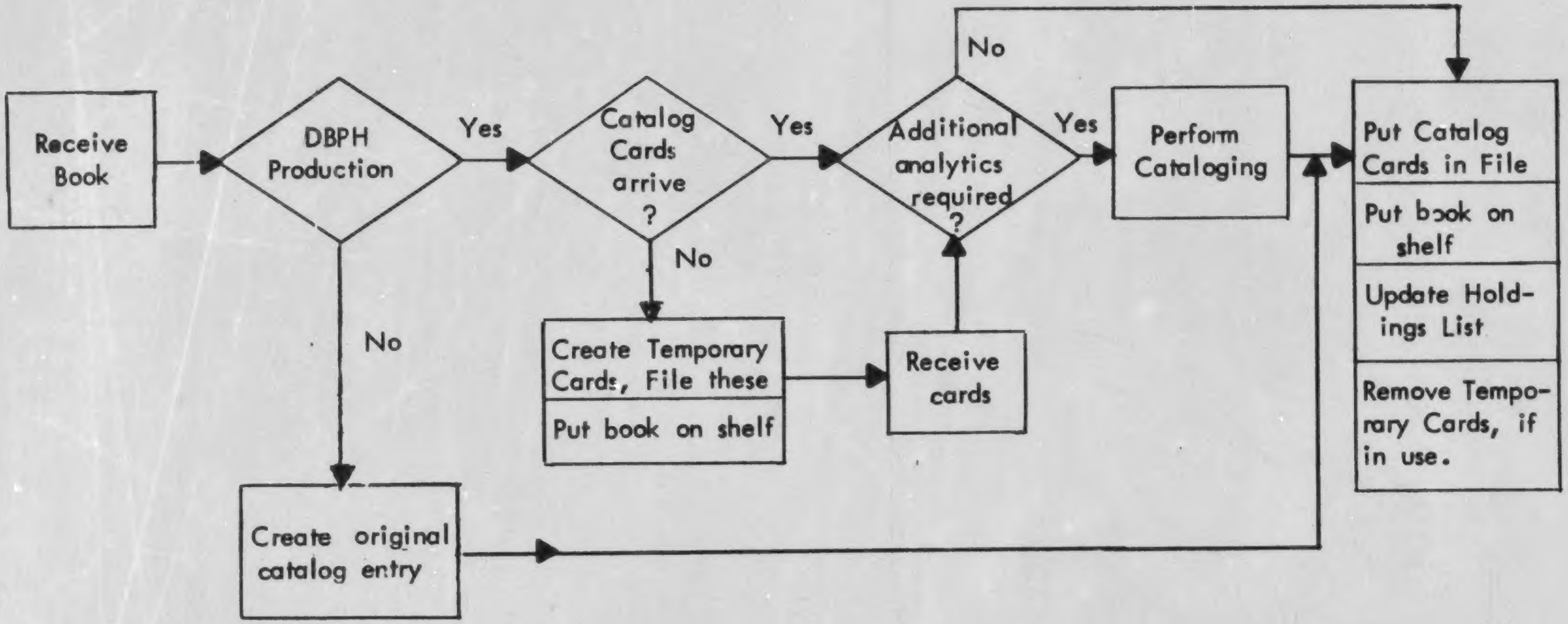
Receive Book
DBPH Production
Yes
No
Catalog Cards arrive ?
Yes
No
Create Temporary Cards, File these
Put book on shelf
Receive cards
Additional analytics required ?
Yes
No
Perform Cataloging
Create original catalog entry
Put Catalog Cards in File
Put book on shelf
Update Holdings List
Remove Temporary Cards, if in use.

FIGURE C-6

CATALOGING

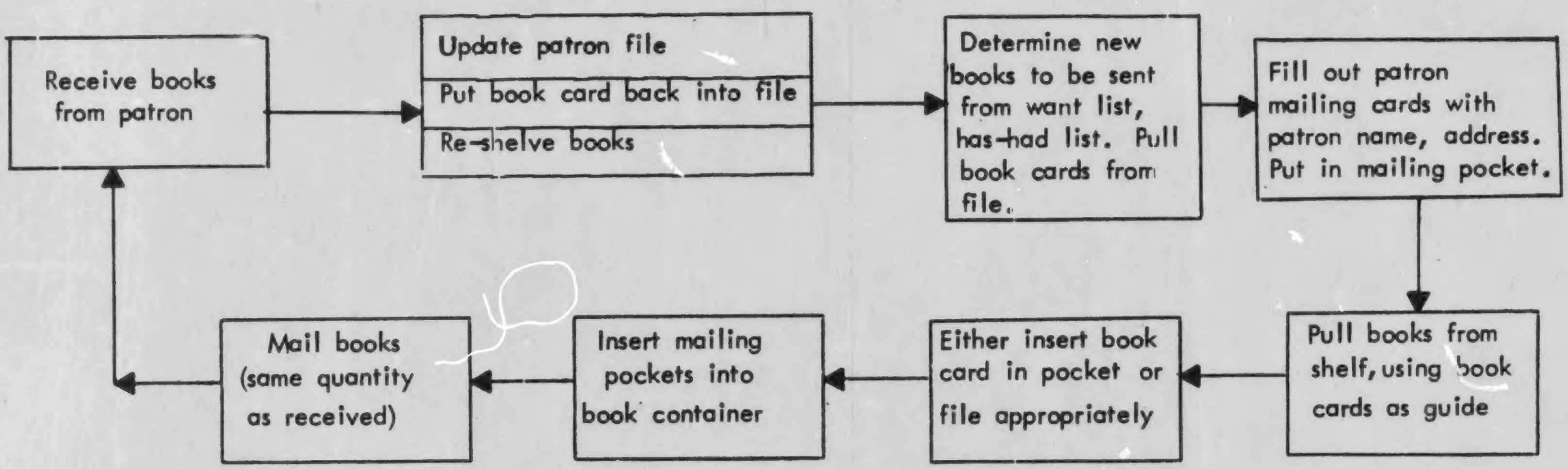
Receive books from patron
Update patron file
Put book card back into file
Re-shelve books
Determine new books to be sent from want list, has-had list. Pull book cards from file.
Fill out patron mailing cards with patron name, address. Put in mailing pocket.
Pull books from shelf, using book cards as guide
Either insert book card in pocket or file appropriately
Insert mailing pockets into book container
Mail books (same quantity as received)

FIGURE C-7

CIRCULATION (TURNABOUT)

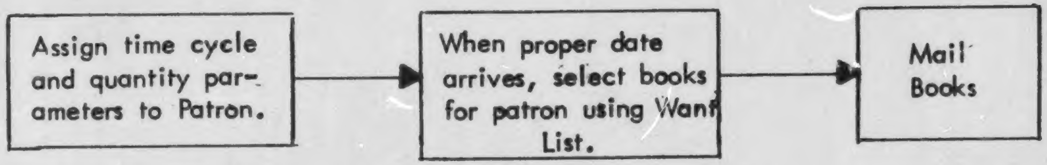
Assign time cycle and quantity parameters to Patron.
When proper date arrives, select books for patron using Want List.
Mail Books

FIGURE C-8

CALENDAR CIRCULATION

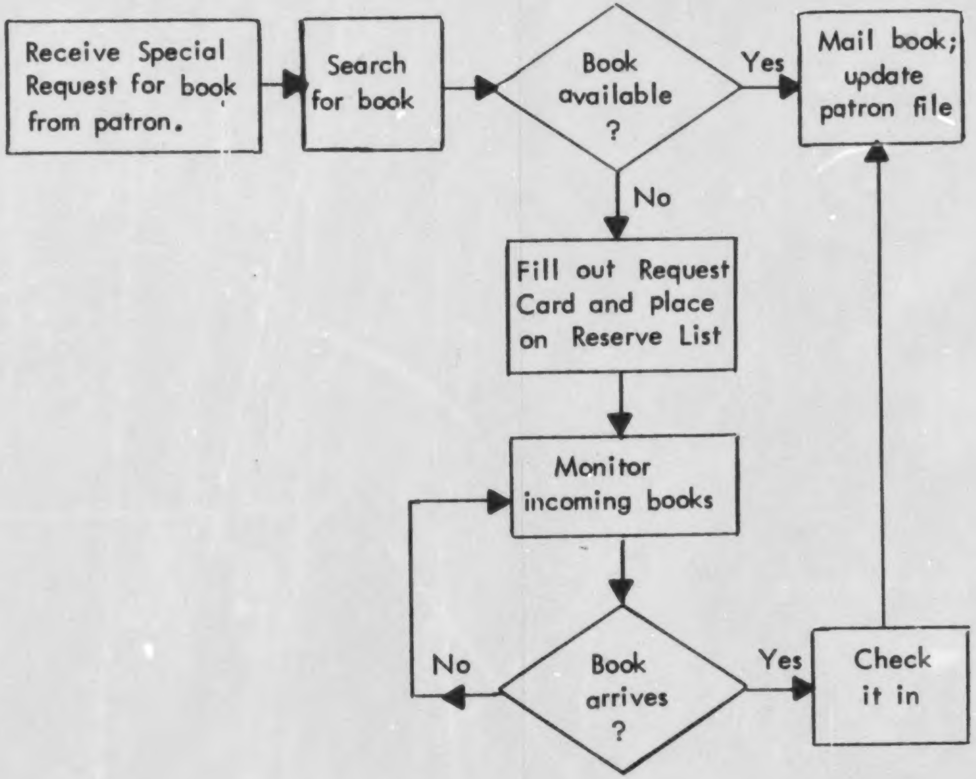
Receive Special Request for book from patron.
Search for book
Book available ?
Yes
Mail book; update patron file
No
Fill out Request Card and place on Reserve List
Monitor incoming books
Book arrives ?
No
Yes
Check it in

FIGURE C-9

SPECIAL REQUEST CIRCULATION

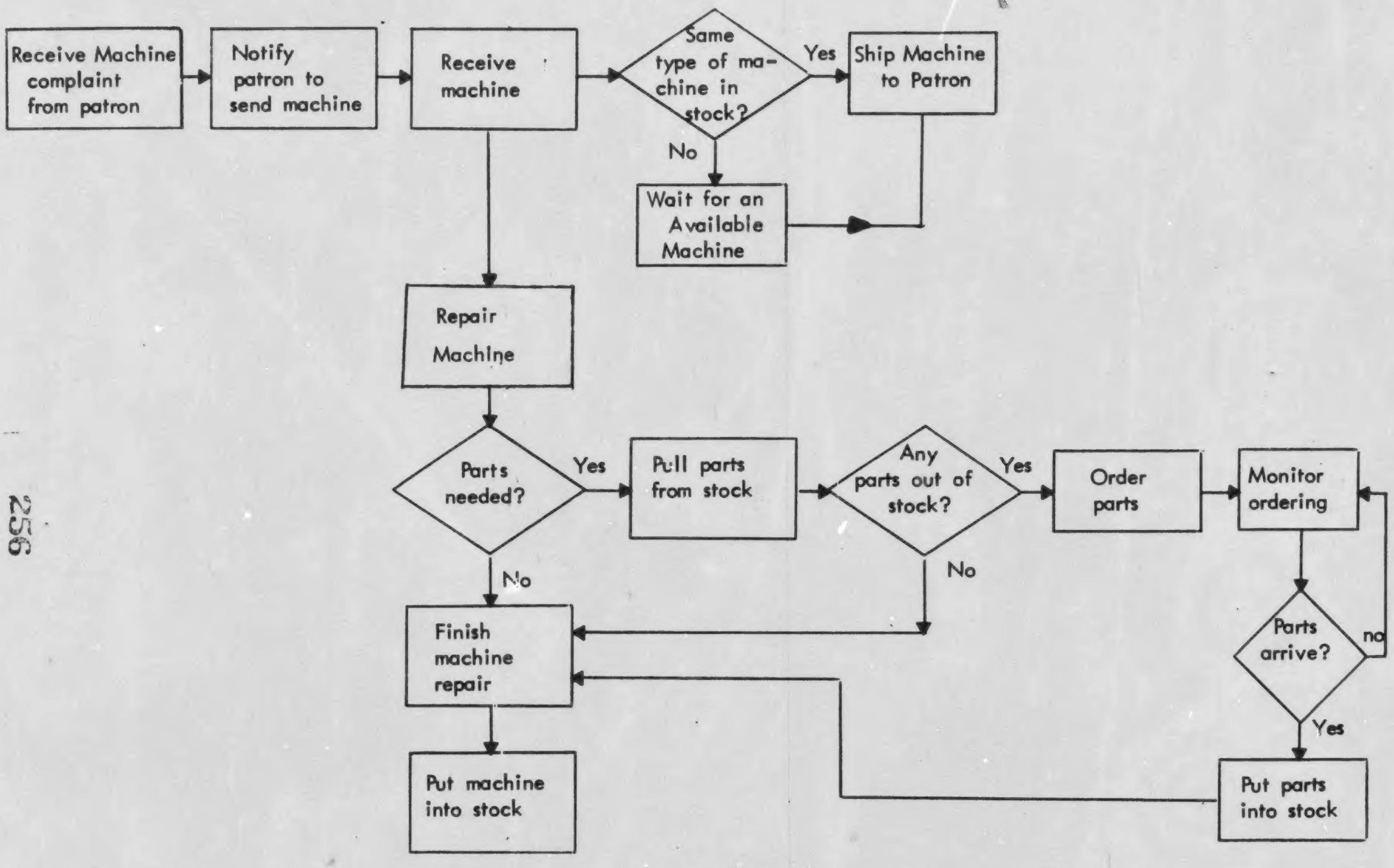

FIGURE C-10

EQUIPMENT REPAIR

## APPENDIX D

## BOOK AND MICROFICHE CATALOG COSTS

In order to determine the feasibility of producing a Union Catalog, Union Catalog Monthly updates, and monthly updates of the in-process file in print and/or microfiche, calculations were completed to determine the size of the catalog and/or file and the cost of producing them.

- UNION CATALOG
- PRINT VERSION

See charts on Schedule Print Catalogs (D-2 through D-5).

### INITIAL WORKING DOCUMENT

Step 1. Ascertaining the number of entries in the document was the first step in determining the size and cost of the first working document produced by the bibliographic system.

No. of Entries -- 1st Working Document = 12,000 mass produced items.

As of June 1974 (the start of the Recataloging Project) there were 9,389 numbers in the verified shelf list.

TB 1-4815 = 4815 book numbers
RD 6000-7152 = 1153 book numbers
CB 1-970 = 970 book numbers
BR 1-2451 = 2451 book numbers
Total 9389 book numbers

Due to the lag between cataloging and final production, gaps of from 1 to 46 numbers were present in the more recent sections of the series. These gaps were not considered significant in the total estimate because a considerable number of containers (i.e., book numbers) having two or more titles had been cataloged under only one title, making any additional titles under that book number inaccessable. Consequently, new full and unique entries were to be made for these titles (per the Cataloging Manual, accepted by Ad hoc Cataloging Committee 8/14/74). It was estimated that a minimum

## SCHEDULE PRINT CATALOGS

| Title | Last Entry Date | Date Issued | Charged To | Contents | Total Costs |
|---|---|---|---|---|---|
| Working Document | May 31, 1975 | Dec. 1975 | Fiscal Year 1976 | DBPH Retrospective Mass Produced Titles = 12,000 | $ 26,250 |
| First Union Catalog | Dec. 31, 1975 | July 1976 | Fiscal Year 1976 | DBPH Retrospective Mass Produced Titles = 12,000<br>DBPH Retrospective Limited Production Titles = 21,815<br>DBPH Mass and Limited Production Titles completed after June 1974 = 2,632<br>Grand Total = 36,447<br>Less duplicates 4,010<br>Actual main entry 32,437 | $ 80,000 |
| | | | | Grand Total Fiscal Year 1976 | $106,250 |

## SCHEDULE PRINT CATALOGS

| Title | Last Entry Date | Date Issued | Charged To | Contents | Total Costs |
|---|---|---|---|---|---|
| Second Union Catalog | Dec. 31, 1976 | July 1977 | Fiscal Year 1977 | Actual main entries from the First Union Catalog = 32,438<br>DBPH Mass and Limited Production Titles Issued Between Jan. 2, 1976 and Dec. 31, 1976 = 2,550<br>Titles from the regional library network = 49,051<br>Titles from affiliated Agencies (APH-IMRC and RFB) = 55,325 | $192,000 |
| | | | | Grand Total = 139,364<br>Less duplicates 5,017<br>Actual main entry 134,347 | |
| | | | | Grand Total Fiscal Year 1977 | $192,000 |

## SCHEDULE PRINT CATALOGS

| Title | Last Entry Date | Date Issued | Charged To | Contents | Total Costs |
|---|---|---|---|---|---|
| Third Union Catalog | Dec. 31, 1977 | July 1978 | Fiscal Year 1978 | Actual main entries from the Second Union Catalog = 134,347<br>DBPH Mass and Limited Production titles Issued Between Jan. 2, 1977 and Dec. 31, 1977 = 2,835<br>Titles from the regional library network = 1,500<br>Titles from 32 affiliated agencies = 52,500 | $256,000 |
| | | | | Grand Total = 191,182 | |
| | | | | Grand Total Fiscal Year 1978 | $256,000 |

of 1,000 book numbers concealed at least one title. Shelf-surveying revealed that early talking books (1-1000) and all children's recordings (approx. 500) were prime candidates for additional entries.

On this basis, it was projected that an additional 1500-2500 titles would have to have entries developed for them, bringing the total number of potential unique entries to 11888. This figure was rounded off to 12000.

Step 2. The following calculations represent the number of index entries in the Author/Title Sort, Subject Heading Index, Narrator Index, DBPH Book Number Index, and Dewey Number Index.

Author/Title Sort = 11724 Title Index Entries

Based on a random survey of 400 items in the collections of mass produced books, .023% of the entries could be title main entries.

| | |
|---|---|
| 12000 | Number of Main Entries |
| x.023 | % of title Main Entries |
| 276.000 | Number of title Main Entries |

| | |
|---|---|
| 12000 | Number of Main Entries |
| - 276 | Number of Title Main Entries |
| 11724 | Number of Title Index Entries |

Subject Heading Index = 62,400 Index Entries

Based on a random survey of 400 items in the collection of mass produced books, it was found that there should be an average of 5.18 subject headings per title.

| | |
|---|---|
| 12000 | Number of Main Entries |
| x 5.2 | Average Number of Subject Headings Title |
| 62400 | Number of Entries in the Subject Heading Index |

DBPH Book Number Index = 9,389 Index Entries

The number of DBPH book numbers in the first working document will equal the number of unique book numbers assigned to titles prior to June 1974. As was pointed out previously, the number of book numbers will not equal the number of main entries because one book number may be assigned to a container holding multiple titles.

Number of Unique Book Numbers Assigned as of June 1974 = 9,389

Narrator Index = 9 120 Index Entries

Again, based on a random survey of 400 mass produced titles, it was calculated that there will be .76 narrators per title (304 narrators ÷ 400 entries = .76 narrators per title).

| | |
|---|---|
| 12000 | Number of Main Entries |
| x .76 | Number of Narrators/Title |
| 9120.00 | Number of Entries in Narrator Index |

Dewey Number Index = 12,000 Index Entries

There should be at least one Dewey Number for each main entry.

| | |
|---|---|
| 12000 | Number of Main Entries |
| x 1 | Number of Dewey Numbers per Main Entry |
| 12000 | Number of Entries in Dewey Number Index |

Author/Title Sort = 11,724 Title Index Entries
Subject Heading Index = 62,400 Index Entries
DBPH Book Number Index = 9,389 Index Entries
Narrator Index = 9,120 Index Entries
Dewey Number Index = 12,000 Index Entries

Step 3. After determining the number of main entries and index entries, it was necessary to ascertain the total number of characters in the average main entry and number of characters in the various elements in the index entries. With one exception this was done for each count by selecting a random group of approximately 400 mass produced entries completed prior to June 1974 and counting the number of characters in the appropriate section(s). (Conclusions drawn from this statistical sample are 95% reliable plus or minus 2 standard deviations).

Average Characters per Main Entry = 546.29

546.29 average number of charcters/entries
401 | 219062 total charcters in all entries
random
entries

In order to derive the number of characters in each type of index entry (title, subject heading, DBPH book number, narrator, and Dewey number) the following calculations were completed:

Average Characters per book number = 6.63

6.63 average characters/book number

400 |26405 total characters in book numbers
entries
from random survey

Average characters per full author statement and name only =

22.13 characters per statement (main entry)
16.84 characters per name (index entry)

22.13 average characters per author statement

390 |8629 total characters in complete author statements
random
entries

16.84 average characters per author name

395 |6652 total characters in author names
random
entries

Average characters per short and full title =

32.87 characters per full title (main entry)
21.01 characters per short title (index entry)

32.87 average characters per full title

402 |13215 total characters in full titles
random
entries

21.01 average characters per short title

408 |8571 total characters in short titles
random
entries

Average characters per subject heading = 28

This figure was supplied by Ms. Susan Beibel, Catalog Control Specialist, Technical Processing Research Office, rather than calculating it from the random survey of entries. The information was taken from an early statistical analysis of the first volume of the MARC Monographs tape (English language entries). The analysis was done in order to determine the length of fields and was based on the communications format. It included embedded subfield codes.

Average characters per Dewey number = 7.18

7.18 average characters per Dewey number
271 ⟌ 1945 total characters in the Dewey numbers
random
entries

Average characters per narrator statement = 32

16.84 average characters per narrator name
395 ⟌ 6652 total characters in narrator names
random
entries

17 average characters per narrator name
+15 characters per punctuation, spaces, producer, and word narrator
32 average characters per narrator statement

## SUMMARY

Average characters per main entry = 546.29
Average characters per book number = 6.63
Average characters per full author statement and name alone = 22.13 characters per full statement (main entry
16.84 characters per author name (index entry)

Average characters per short and full title = 32.87 characters per full title (main entry)
21.01 characters per short title (index entry)

Average characters per subject heading = 28
Average characters per Dewey number = 7.18
Average characters per narrator statement = 32

Step 4. Having arrived at the number of entries in the working document and the number of characters in relevant portions of the entry, it was possible to calculate the number of pages and volumes required for the catalog. Preliminary information was also gathered from Mary Kay Daniels, Library Information Systems Specialist, Catalog Distribution Services, concerning the number of characters per line and lines per page, assuming a 3 column page in 6 point type (45 characters per line; 83 lines per page).

Number of characters per average complete main entry as formatted on the page = 639 characters

Average characters/main entry = 546
Spaces between book number and author = 3
Indention on title line = 15
Indention on second line of title = 10
Blank line between title paragraph and collation = 45
Indention on collation line = 5
Indention on first line of annotation = 5
Indention on first line of contents = 5
Indention on first line of subject headings = + 5

Total characters per main entry = 639

Number of characters per average index entry in the author/Title sort = 50

Average characters per short title = 21
Average characters per author name = 17
Average characters per book number = 7
Indention = + 5

Total characters = 50

Number of characters per average entry in the Subject Heading Index = 78

Average characters per subject heading = 28
Average characters per author name = 17
Average characters per short title = 21
Average characters per book number = 7
Indention = + 5

Total characters = 78

Number of characters per average entry in the DBPH Book Number Index = 50

Average characters per book number = 7
Average characters per author name = 17
Average characters per short title = 21
Indention = + 5

Total characters = 50

Number of characters per average entry in the Narrator Index = 82

Average characters per narrator statement = 32
Average characters per author name = 17
Average characters per short title = 21
Average characters per book number = 7
Indention = + 5

Total characters = 82

Number of characters per average entry in the Dewey Number Index = 57

Average characters per Dewey number = 7
Average characters per author name = 17
Average characters per short title = 21
Average characters per book number = 7
Indention = + 5

Total characters = 57

## SUMMARY

Number of characters per average complete main entry as formatted on the page = 639
Number of characters per average index entry in the Author/Title sort = 50
Number of characters per average entry in the Subject Heading Index = 78
Number of characters per average entry in DBPH Book Number Index = 50
Number of characters per average entry in the Narrator Index = 82
Number of characters per average entry in the Dewey Number Index = 57

Number of lines required for the complete main entry = 16

14.2 lines per complete main entry
45 |639 total characters in complete main entry
characters
per line

14 lines per complete main entry
+ 2 between entries
16 lines total

Number of lines required for title index entries in Author/Title sort = 4

Formatted entry:

21 character title = 1st line
29 characters in remaining portions of index entry = 2nd line

Total = 2 lines

2 lines per index entry
+2 lines between entries
4 lines total

Number of lines required for entries in Subject Heading Index = 5

Formatted entry:

28 character subject heading = 1st line
50 characters in remaining portions of index etnry = 2nd and 3rd lines

Total = 3 lines

3 lines per index entry
+2 lines between entries
5 lines total

Number of lines required for entries in DBPH Book Number Index = 4

Formatted entry:

7 character book number = 1st line
43 characters in remaining portion of index entry = 2nd lines

Total = 2 lines

2 lines per index entry
+2 lines between entries
4 lines total

Number of lines required for entries in the Narrator Index = 5

Formatted entry:

32 character narrator statement = 1st line
50 characters in remaining portions of index entry = 2nd and 3rd lines

Total = 3 lines

3 lines per index entry
+2 lines between entries
5 lines total

Number of lines required for entries in the Dewey Number Index = 5

Formatted entry:

7 character Dewey number = Ist line
50 characters in remaining portions of index entry = 2nd and 3rd line

Total = 3 lines

3 lines per index entry
+2 lines between entries
5 lines total

## SUMMARY

Number of lines required for the complete main entry = 16
Number of lines required for title index entries in the Author/Title sort = 4
Number of lines rewuired for entries in the Subject Heading Index = 5
Number of lines required for entries in the DBPH Book Number Index = 4
Number of lines required for entries in the Narrator Index = 5
Number of lines required for entries in the Dewey Number Index = 5

Number of main entries per page = 15

5.19 entries per column
16 ⟌83 lines per column
lines per
main entry

5 main entries per column
x3 columns per page column
15 main entries per page

Number of title index entries per page = 60

20.75 entries per column
4 ⟌83 lines per column
lines per
title index
entry

20 title entries per column
x3 columns per page
60 title index entries per page

Number of subject index entries per page = 48

16.6 entries per column
5 |83 lines per column
lines per
subject
heading entry

16 subject entries per column
x3 columns per page
48 subject index entries per page

Number of DBPH book number index entries per page = 60

20.75 entries per column
4 |83 lines per column
lines per
book number
entry

20 book number entries per column
x3 columns per page
60 book number entries per page

Number of narrator index entries per page = 48

16.6 entries per column
5 |83 lines per column
lines
per narrator
entry

16 narrator entries per column
x3 columns per page
48 narrator entries per page

Number of Dewey number index entries per page = 48

16.6 entries per column
5 |83 lines per column
lines per
Dewey number
entry

16 Dewey number entries per column
x3 columns per page
48 Dewey number entries per page

## SUMMARY

Number of main entries per page = 15
Number of title index entries per page = 60
Number of subject index entries per page = 48
Number of DBPH book number index entries per page = 60
Number of narrator index entries per page = 48
Number of Dewey number index entries per page = 48

Number of pages in the Author/Title (Main Entry/Title) sort = 996

800 pages for main entries
15 /12000 main entries
main
entries
per page

195.4 pages for title index
60/11724 title index entries
title
entries
per page

800 pages for main entries
+196 pages for title index entries
996 total pages in Author/Title sort

Number of pages in the Subject Heading Index = 1300

1300 pages for subject index entries
48/62400 subject index entries
subject
entries per page

Number of pages in the DBPH book Number Index = 156.48

156.48 pages for DBPH book number index entries
60/9389 DBPH book number entries
DBPH book
number
index entries per page

Number of pages in the Narrator Index = 190

190 pages for narrator index entries
48 | 9120 narrator index entries
narrator
index entries
per page

Number of pages in the Dewey Number Index = 250

250 pages for Dewey number index entries
48 | 12000 Dewey number entries
Dewey index
entries per
page

Total number of pages in the 4 indices = 1897

1300 pages for subject index entries
157 pages for DBPH book number index entries
190 pages for narrator index entries
+250 pages for Dewey number index entries
1897 Total pages for 4 indices

## SUMMARY

Number of pages in the Author/Title (Main Entry/Title) sort = 996
Total number of pages in the 4 indices = 1897

The optimum size for a volume of a catalog is from 500 to 1000 pages; therefore, it was estimated that the first working document would require three volumes:

Volume 1 = 996 page Author Title Sort
Volumes 2 and 3 = 1897 page sort of 4 Indices

Step 5. Given a three volume catalog, the next step was to determine the number of copies of the catalog required and the cost to produce it in the quantity desired. Since the initial working document may be used for many purposes such as shelf surveys, demonstration, evaluation, etc., it was decided that 1000 copies would be needed. The proposed distribution of the copies is as follows:

| | | |
|---|---|---|
| DBPH | | 61 |
| Office of the Chief | 3 | |
| Project Coordination Office | 4 | |
| Office Services | 1 | |
| Publication Services | 2 | |
| Building Services | 1 | |
| Materials Development Office | 2 | |
| Collection Development Section | 6 | |
| Processing Section | 6 | |
| Production Section | 3 | |
| Technical Section | 1 | |
| Network Development Office | 2 | |
| Reference Section | 5 | |
| Music Section | 2 | |
| Volunteer Training Section | 1 | |
| Volunteer Utilization Section | 1 | |
| Network Services Section | 1 | |
| Resources Coordination Unit | 5 | |
| Circulation and Collection Maintenance Unit | 5 | |
| Retrospective Cataloging Project | 10 | |
| Multi-state Centers | | 20 |
| Florida | 10 | |
| Utah | 10 | |
| Regional Libraries | | |
| An average of 8 per Library x 54 = | | 432 |
| Subregional Libraries | | |
| An average of 4 per Library x 102 = | | 408 |
| Other | | 79 |
| Major Affiliated Agencies | 20 | |
| Replacement Copies | | |
| DBPH | 20 | |
| Network Libraries | 20 | |
| Miscellaneous | 19 | |
| Grand Total | | 1000 |

Base prices to print a catalog as quoted by Ms. Jones, of the Office of the Director of Printing and Publications, Government Printing Office are $8,000 to produce 500 copies of 1 (700-1000 page) print volume plus $1.50 per copy for each additional copy. Therefore, the initial 3 volume working document would cost:

| | | |
|---|---|---|
| Cost of 500 copies of 1 volume | = | $ 8,000 |
| Each additional copy ($1.50 x 500) | | 750 |
| Total cost for 1000 copies of 1 volume | | $ 8,750 |

| | |
|---|---|
| Cost of 1000 copies of 1 volume | $ 8,750 |
| Number of volumes | x 3 |
| Total cost for 1000 copies of 3 volumes | $26,250 |

## SUMMARY

It was determined that 1000 copies of the 3 volume initial working document would be needed. The cost for the required number of copies of these three volumes should be $26,250.

## FIRST UNION CATALOG

It is estimated that the first Union Catalog should be issued in July of 1976. It will be greatly expanded over the first working document and should include a new format for the main entry (see Chapter 4, page 59). Most calculations used to determine the cost of this first Union Catalog are identical to those described for the first working document; and, therefore, only the results will be given. However, where variations occur they will be indicated.

Step 1. The number of main entries in the first Union Catalog was determined by counting the number of individual DBPH numbers that will be input in the time span allowed and adding the number of main entries in the first working document. The numbers represented are covered in the chart (page 2) preceding the calculations for the print catalog.

Number of items in the first Union Catalog = 36,447

Since it was known that multiple versions of the same item existed within the DBPH collection, a random survey of 5% (6 drawers) of the dictionary card catalog was done. This survey determined that 11% of the entries will be duplicates. Therefore, the total number of possible items in the catalog was reduced by the percentage of duplicates.

36,447 Total number of possible items
x .11 Percentage of duplication
4,009.17

36,447.00 Total number of possible items
-4,009.17 Number of duplicate items
32,437.83 Number of main entries

## SUMMARY

Number of main entries in the first Union Catalog = 32,437.83

Step 2. The following are the results of calculations to determine the number of items in the Author/Title sort and 4 indices.

Author/Title Sort = 31,692 title index entries
(See method of calculation page 7)

Subject Heading Index = 168,029
(See method of calculation page 7)

DBPH Book Number Index = 36,447

1.12358 Number of book numbers per main entry
32,438⟌36,447 total number of book numbers
Number of
main entries

32,438 Number of main entries
x 1.12358 Number of book numbers per main entry
36,446.688 Number of entries in DBPH Book Number Index

Narrator Index = 19,736

17,736 Total book numbers in recorded media
+2,000 Projected number of concealed titles
19,736 Total numbers of entries with narrators

.5415 Number of narrators per title
36,447⟌19,736 Total entries with narrators
Total number
of book numbers

36,447 Total number of book numbers
x5,415 Number of narrators per title
19,736.05 Number of entries in Narrator Index

Dewey Number Index = 32,438
(See method of calculation page 8)

## SUMMARY

Author/Title Sort = 31,692 Title Index Entries
Subject Heading Index = 168,029 Index Entries
DBPH Book Number Index = 36,447 Index Entries
Narrator Index = 19,736 Index Entries
Dewey Number Index = 32,438 Index Entries

Step 3. Since most of the character counts for significant portions of the main entry should remain the same, these items were not recalculated. Two entities (main entry and DBPH book number) did vary, however, and these were recalculated.

Average characters per main entry = 676

546.00 Average number of characters per entry in first working document
-29.44 Average number of characters per collation statement
516.56 Average number of characters per partial entry

5.00 Number of characters allowed for holdings code
26.44* Average characters in collation statement
+12.00 Maximum characters allowed for book number
43.44 Characters per holding statement

1.12 Holdings statements per main entry
32,437.83 ⟌36,447 Total (unique) items held
Total
main entries

43.44 Average characters per holdings statement
+1.12 Holdings statements per main entry
48.65 Total characters for holdings statements for each entry

* Number of characters allowed for the holdings code has been reduced from 29.44 to 26.44 because of further abbreviation of terms in the first Union Catalog over the first working document (e.g., v. for vols., c. for cass.)

| | |
|---|---|
| 517 | Average number of characters per partial main entry |
| 49 | Total characters for holdings statements for each entry |
| 110 | Blank lines and indentions |
| 676 | Characters per main entry |

Average characters per book number = 6.4

6.43 Average Number of characters per book number
32,683 ⟌210286 Total number of characters in all book numbers
Actual number
of book numbers

Average characters per full author statement and name alone =

22.13 characters per statement (main entry)
16.84 characters per name (index entry)
(See method of calculation page 7)

Average characters per short and full title =

32.87 characters per full title (main entry)
21.01 characters per short title (index entry)
(See method of calculation page 7)

Average characters per subject heading = 28

(See method of calculation page 7)

Average characters per Dewey number = 7.18

(See method of calculation page 8)

Average characters per narrator statement = 32

(See method of calculation page 8)

## SUMMARY

Average characters per main entry = 676
Average characters per book number = 6.4
Average characters per full author statement and name alone =

22.13 characters per full statement (main entry)
16.84 characters per name (index entry)

Average characters per short and full title =

32.87 characters per full title (main entry)
21.01 characters per short title (index entry)

Average characters per subject heading = 28
Average characters per Dewey number = 7.18
Average characters per narrator statement = 32

Step 4. Given the number of entries in the first Union Catalog and the number of characters in significant portions of the entry, it was possible to derive the number of pages and volumes involved. Once again information and methods of calculation are not reiterated unless they are unique.

Number of characters per average complete main entry as formatted on the page = 676 characters

Average number of characters per partial main entry = 517
Indention of title line = 5
Blank line between title paragraph and annotation = 45
Indention of first line of the annotation = 5
Indention of first line contents notes = 5
Indention of first line of subject headings = 5
Blank line between end of main entry and holding statement(s) = 45
Characters per holding statements = 49
Total characters per main entry = 676

Number of characters per average index entry in the Author/Title sort = 51
(See method of calculation page

Number of characters per average entry in the Subject Heading Index = 79
(See method of calculation page 9)

Number of characters per average entry in the DBPH Book Number Index = 51
(See method of calculation page 9)

Number of characters per average entry in the Narrator Index = 83
(See method of calculation page 10)

Number of characters per average entry in the Dewey Number Index = 58
(See method of calculation page 10)

## SUMMARY

Number of characters per average complete main entry as formatted on the page = 676
Number of characters per average index entry in the Author/Title sort = 51
Number of characters per average entry in the Subject Heading Index = 79
Number of characters per average entry in the DBPH Book Number Index = 51
Number of characters per average entry in the Narrator Index = 83
Number of characters per average entry in the Dewey Number Index = 58

## SUMMARY

Number of lines required for the complete main entry = 17
Number of lines required for title index entries in Author/Title sort = 4
Number of lines required for entries in Subject Heading Index = 5
Number of lines required for entries in DBPH Book Number Index = 4
Number of lines required for entries in the Narrator Index = 5
Number of lines required for entries in the Dewey Number Index = 5
(See method of calculation for the above pages 10–12)

## SUMMARY

Number of main entries per page = 12
Number of title index entries per page = 60
Number of subject index entries per page = 48
Number of DBPH book number index entries per page = 60
Number of narrator index entries per page = 48
Number of Dewey number index entries per page = 48
(See method of calculation for the above pages 12–14)

## SUMMARY

Number of pages in the Author/Title (Main Entry/Title) sort = 3,233
Total number of pages in the 4 indices = 5,196
(See method of calculation for the above pages 14–15)

## SUMMARY

Total number of volumes for the first Union Catalog = 10

Author/Title Volumes = 4
Index Volumes = 6

(See text page 19 concerning optimum pages per volume)

Step 5. Since the original need for providing multiple copies of the print catalog should be altered somewhat by the suggestions made concerning the first working document and since the cost of the product will escalate rapidly as the number of volumes increases, only 500 copies of the first Union Catalog will be provided. The distribution pattern is:

| | | |
|---|---|---|
| DBPH | | 42 |
| Office of the Chief | 2 | |
| Project Coordination Office | 2 | |
| Office Services | 0 | |
| Publication Services | 2 | |
| Building Services | 0 | |
| Materials Development Office | 2 | |
| Collection Development Section | 6 | |
| Processing Section | 6 | |
| Production Section | 3 | |
| Technical Section | 0 | |
| Network Development Office | 2 | |
| Reference Section | 3 | |
| Music Section | 2 | |
| Volunteer Training Section | 0 | |
| Volunteer Utilization Section | 1 | |
| Network Services Section | 1 | |
| Resources Coordination Unit | 5 | |
| Circulation and Collection Maintenance Unit | 5 | |
| Multi-state Centers | | 8 |
| Florida | 4 | |
| Utah | 4 | |
| Regional Libraries | | |
| An average of 4 per Library x 54 = | | 216 |
| Subregional Libraries | | |
| An average of 2 per Library x 102 = | | 204 |
| Other | | |
| Replacement Copies and Miscellaneous | | 30 |
| Grand Total | | 500 |

## SUMMARY

To print 500 copies of a 10 volume catalog, it should cost $80,000. (See method of calculation page 17).

## SECOND UNION CATALOG

Although the number of entries in the Second Union Catalog will increase significantly over the First Union Catalog, the format should remain the same. Once again, most calculations are identical in method to those completed for the First Union Catalog; and, thus, unless a variation occurs, only results are given.

Step 1. To arrive at the number of main entries in the Second Union Catalog, the number of entries in the First Union Catalog was accepted as the base (32,438). To this figure was added 2,550 mass and limited production titles prepared by DBPH. Since the year covered by the catalog represents a calendar year while the book quotas are fixed on the basis of a fiscal year, the annual DBPH production in the Second Union Catalog was calculated to be 2,550.

3/4 of Fiscal Year 1976 x 2,500 Titles = 1875 FY1976 Titles

1/4 of Fiscal Year 1977 x 2,700 Titles = 675 FY1977 Titles

1,875 FY1976 Titles
+ 675 FY1977 Titles
2,550 Total DBPH Titles

The second Union Catalog will also include titles from network libraries and two affiliated agencies. In the survey of regional libraries conducted in the course of this study, a question was asked concerning the percentage on non-DBPH produced material in each library's collection. Answers ranged from estimates of 1% to 50% non-DBPH material. In the professional judgement of responsible members of the DBPH staff, 3% is probably a more accurate representation of the non-DBPH material. Therefore, using this percentage and the total number of DBPH mass produced and open reel tape titles, the following calculations were performed to arrive at the number of non-DBPH network titles.

18,947 Total DBPH mass produced and open reel tape titles
x .03 % of non-DBPH titles in each regional library
568.41 Number of non-DBPH titles per library

568 Number of non-DBPH titles per library
x53 Number of regional libraries (excluding Iowa)
30,104 Number of non-DBPH titles in 53 regional libraries

The Iowa regional library estimated that 50% of their collection consists of non-DBPH items. Since the Iowa collection of limited production material is extensive, this figure was accepted as valid; therefore, an additional 18,947 titles should be added to the total of non-DBPH material in regional library collections.

| | |
|---|---|
| 30,104 | Num[illegible]f non-DBPH titles in 53 regional libraries |
| +18,947 | Non-DBPH titles in Iowa's collection |
| 49,051 | Total non-DBPH titles in regional libraries collections |

To derive the number of potential entries from the two major affiliated agencies, the American Printing House for the Blind, Instructional Materials Reference Center (APH - IMRC), and Recordings for the Blind (RFB), which will probably be included first, both APH - IMRC and RFB were contacted. RFB indicated that their collection as of December 1976 will probably consist of 35,500 titles all of which are reported to APH - IMRC.

| | |
|---|---|
| 31,000 | Size of present collection |
| +4,500 | Additions per year |
| 35,500 | Total collection as of December 1976 |

Mr. Carl Lappin of APH-IMRC indicated that they will have a registry of 50,000 titles by December 1976 including RFB titles.

| | |
|---|---|
| 40,000 | Size of present collection |
| +10,000 | Additions per year |
| 50,000 | Total collections as of December 1976 |

Although RFB does report all of its titles to APH-IMRC, approximately 10% to 15% of the titles are not texts; and, consequently, they are not included in the APH-IMRC registry.

| | |
|---|---|
| 35,500 | Total RFB collection as of December 1976 |
| x .15 | Percentage of non-text material |
| 5,325 | Number of non-texts in RFB collection |

| | |
|---|---|
| 50,000 | APH-IMRC collection (including RFB texts) |
| +5,325 | RFB non-textual material |
| 55,325 | Size of total collection from APH-IMRC and RFB as of December 1976 |

Based on a comparison of every 20th page of the RFB catalog against the DBPH existing dictionary catalog, there could be a .036% duplication of items. Consequently, the total collection less duplicates would consist of 134,347 items.

| | |
|---|---|
| 139,364 | Total possible entries in 2nd Union Catalog |
| x .036 | % of duplication |
| 5,017 | Number of duplicates |

| | |
|---|---|
| 139,364 | Total possible entries in 2nd Union Catalog |
| - 5,017 | Possible duplicates |
| 134,347 | Titles in the 2nd Union Catalog |

## SUMMARY

Number of main entries in the second Union Catalog = 134,347

Step 2. Calculations to determine the number of items in the Author/Title sort and 4 indices produced the following results.

Author/Title Sort = 131,237 title index entries
(See method of calculation page 7)
Subject Heading Index = 315,045 index entries

| | |
|---|---|
| 34,988 | Number of DBPH produced titles |
| x 5.18 | Average number of subject headings per title |
| 181,237.84 | Number of entries in subject heading index |

| | |
|---|---|
| 49,051 | Number of Network produced titles |
| x 1.6* | Average number of subject headings per title |
| 78,481.6 | Number of entries in subject heading index |

| | |
|---|---|
| 55,325 | Number of APH-IMRC and RFB titles |
| x 1 | Average number of subject headings per title |
| 55,325 | |

| | |
|---|---|
| 181,238 | Number of DBPH entries in index |
| 78,482 | Number of Network entries in index |
| +55,325 | Number of APH-IMRC and RFB entries in index |
| 315,045 | Total number of entries in subject heading index |

DBPH Book Number Index = 34,988

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* Ms. Beibel, Catalog Control Specialist, Technical Processing Research Office, said that a 1973 survey showed an average of 1.6 subject headings per L.C. cataloged title. Since many network libraries may not be cataloging material, the MARC record may have to be used. Therefore, the LC figure should be valid.

Since duplication of titles under different book numbers (ratio of book numbers to books) would probably decrease as the DBPH collection is put under tighter control, the figure used as the average number of book numbers per item has been reduced from 1.12 to 1.

| | |
|---|---|
| 34,988 | Number of DBPH produced titles |
| x 1 | Number of book numbers/items |
| 34,988 | Number of entries in the DBPH Book Number Index |

Narrator Index = 19,243

Existing APH-IMRC and RFB catalogs do not include narrator nor do the registration cards submitted by DBPH network libraries. Therefore, only DBPH narrators were calculated.

| | |
|---|---|
| 17,736 | Total book numbers in recorded media from the previous catalog |
| +1,700 | Total book numbers in recorded media from portion of FY1976 and FY1977 titles included in this catalog.* |
| 19,436 | Total book numbers for recorded media |

.55 narrators/title
34,988 ⟌ 19,436 Total book numbers for recorded media
Total DBPH main entries

| | |
|---|---|
| 34,988 | Total DBPH main entries |
| x .55 | narrator/title |
| 19,243.4 | Entries in Narrator Index |

Dewey Number Index = 119,539

APH-IMRC does not give Dewey Numbers for its titles; and, therefore, calculations were not made for their titles.

| | |
|---|---|
| 34,988 | Number of DBPH produced titles |
| x 1 | Average number of Dewey Numbers per title |
| 34,988 | Number of entries in the Dewey Number Index |

| | |
|---|---|
| 49,051 | Number of network produced titles |
| x 1 | Average number of Dewey Numbers per title |
| 49,051 | Number of entries in Dewey Number Index |

---

* According to Mona Werner, Head, Collection Development Section, approximately 1/3 of the titles produced each year are in braille.

| | |
|---|---|
| 35,500 | Number of RFB produced titles |
| x 1 | Average number of Dewey Numbers per title |
| 35,500 | Number of entries in Dewey Number Index |

| | |
|---|---|
| 34,988 | Number of DBPH entries in index |
| 49,051 | Number of Network entries in index |
| +35,500 | Number of RFB entries in index |
| 119,539 | Total number of entries in Dewey Number Index |

## SUMMARY

| | | |
|---|---|---|
| Author/Title Sort | = | 131,237 title index entries |
| Subject Heading Index | = | 315,045 index entries |
| DBPH Book Number Index | = | 34,988 index entries |
| Narrator Index | = | 19,243 index entries |
| Dewey Number Index | = | 119,539 index entries |

Step 3. Again, most of the character counts involved in figuring the Second Union Catalog will remain the same; therefore, these figures were not recalculated. The only two which vary are the main entry and the book number.

Average characters per DBPH main entry as formatted on the page = 676
(See method of calculation page 17)

Average characters per non-DBPH main entry as formatted on the page = 483

| | |
|---|---|
| 676 | Characters per DBPH main entry |
| -193 | Average number of characters in annotation |
| 483 | Number of characters in non-DBPH main entry as formatted on the page |

Average characters per book number = 9.48

9.48 Average number of characters per book number
119,784⟌1135211 Total number of characters in all book numbers
Actual number of book numbers

Average characters per full author statement and name alone =

| | |
|---|---|
| 22.13 | characters per statement (main entry) |
| 16.84 | characters per name (index entry) |

(See method of calculation page 7)

Average characters per short and full title =

32.87 characters per full title (main entry)
21.01 characters per short title (index entry)
(See method of calculation page 10)

Average characters per subject heading = 28
(See method of calculation page 8)

Average characters per Dewey number = 7.18
(See method of calculation page 8)

Average characters per narrator statement = 32
(See method of calculation page 8)

## SUMMARY

Average characters per DBPH main entry as formatted on the page = 676

Average characters per non-DBPH main entry as formatted on the page = 483

Average characters per book number = 9.48

Average characters per full author statement and name alone =

22.13 characters per full statement (main entry)
16.84 characters per name (index entry)

Average characters per short and full title =

32.87 characters per full title (main entry)
21.01 characters per short title (index entry)

Average characters per subject heading = 28

Average characters per Dewey number = 7.18

Average characters per narrator statement = 32

Step 4. The number of pages and volumes in the Second Union Catalog was calculated based on the information presented in Steps 1, 2 and 3.

## SUMMARY

Number of characters per average complete DBPH main entry as formatted for the page = 676

Number of characters per average complete non-DBPH main entry as formatted for the page = 483

Number of characters per average index entry in Author/Title sort = 52

Number of characters per average index entry in the Subject Heading Index = 80

Number of characters per average index entry in the DBPH Book Number Index = 52

Number of characters per average index entry in the Narrator Index = 84

Number of characters per average index entry in the Dewey Number Index = 59

(See method of calculation for the above, pages 8-10)

## SUMMARY

Number of lines required for the complete DBPH main entry = 17

Number of lines required for the complete non-DBPH main entry = 12

Number of lines required for title index entries in Author/Title sort = 4

Number of lines required for entries in Subject Heading Index = 5

Number of lines required for entries in DBPH Book Number Index = 4

Number of lines required for entries in the Narrator Index = 5

Number of lines required for entries in the Dewey Number Index = 5

(See method of calculation for the above, pages 10-12)

## SUMMARY

Number of DBPH main entries per page = 12

Number of non-DBPH main entries per page = 18

Number of title index entries per page = 60

Number of subject index entries per page = 48

Number of DBPH book number index entries per page = 60

Number of narrator index entries per page = 48

Number of Dewey number index entries per page = 48

(See method of calculation for the above, pages 12-14)

## SUMMARY

Number of pages in the Author/Title sort = 10,623

$$\begin{array}{r|l} & \overline{2915.66 \text{ pages for DBPH main entries}} \\ 12 & 34{,}988 \text{ DBPH main entries} \end{array}$$

DBPH
entries
per page

$$\begin{array}{r|l} & \overline{5519.94 \text{ pages for non-DBPH main entries}} \\ 18 & 99{,}359 \text{ non-DBPH main entries} \end{array}$$

Non-DBPH
entries per
page

2,916 Pages for DBPH main entries
+5,520 Pages for non-DBPH main entries
8,436 Total pages for main entries

$$\begin{array}{r|l} & \overline{2187.28 \text{ pages for title index entries}} \\ 60 & 131{,}237 \text{ title index entries} \end{array}$$

Title index
entries per
page

8,436 Pages for main entries
+2,187 Pages for title index entries
10,623 Total pages for Author/Title sort

Total number of pages in the 4 indices = 10,107
(See method of calculation, page 14-15)

## SUMMARY

Total number of volumes for the second Union Catalog = 24

Author/Title Volumes = 12
Index Volumes = 12
(See method of calculation, page 15)

Step 5. Again, it is estimated that 500 sets of the catalog will be required. Subject to adjustments based on experience, the distribution will remain exactly as specified for the first Union Catalog. (See page 23 for distribution)

## SUMMARY

To print 500 sets of the Second Union Catalog should cost $192,000. (See page 17 for method of calculation).

## THIRD UNION CATALOG

As in the Second Union Catalog the number of entries will increase substantially but the catalog format will remain intact. Calculations completed in the process of arriving at the final costs will be cited, as before, only if they vary in some way from previous methods.

Step 1. The number of main entries calculated for the Second Union Catalog was taken as the primary figure for calculating the Third Union Catalog (134,347). To this was added DBPH mass and limited production titles for the calendar year 1977 (2835). As the next step the 1500 estimated additions from the network were added.*

Finally, since the Third Union Catalog should begin including items from other affiliated agencies besides APH-IMRC and RFB, an additional 52,500 titles were added. APH-IMRC and RFB would contribute 10,450 of these titles while 30 other organizations would send in 42,050 titles. In order to obtain this estimate of 42,050 titles, the number of items in the catalogs of 25 groups were calculated and an additional 5 producers were called for their estimated production. Although this figure includes some texts that would be reported to APH-IMRC as well as some duplication, the figure is probably relatively accurate since other groups were not surveyed. Therefore, the make-up of the catalog would be as follows:

| | |
|---:|---|
| 134,347 | 2nd Union Catalog |
| 2,835 | DBPH mass and limited title production |
| 1,500 | Network title production |
| +52,500 | Affiliated agency title production |
| 191,182 | Grand Total |

## SUMMARY

Number of main entries in the third Union Catalog = 191,182

Step 2. The following are the results of calculations of the number of items in the Author/Title sort and 4 indices.

* 1,326 copyrights were cleared for non-DBPH groups and/or libraries between April 1974 and March 1975. Since it is not possible to tell at this point how many of those clearances represented library requests, how many were actually completed, and how much growth in output can be anticipated, the figure of 1,500 was used in order to allow a generous margin for hidden material.

## SUMMARY

Author/Title Sort = 186,785 title index entries
Subject Heading Index = 384,630 index entries
DBPH Book Number Index = 37,823 index entries
Narrator Index = 21,181 index entries
Dewey Number Index = 170,424 index entries
(See method of calculation for the above on pages 5-6, 16)

Step 3. The character counts completed for the first Union Catalog were accepted as the basis of calculation for the Third Union Catalog with the exceptions of the average number of characters for the book number. This figure was recalculated.

## SUMMARY

Average characters per DBPH main entry as formatted on the page = 676
Average characters per non-DBPH main entry as formatted on the page = 483
Average characters per book number = 10
Average characters per full author statement and name alone =

22.13 characters per full statement (main entry)
16.84 characters per name (index entry)

Average characters per short and full title =

32.87 characters per full title (main entry)
21.01 characters per short title (index entry)

Average characters per subject heading = 28
Average characters per Dewey number = 7.18
Average characters per narrator statement = 32
(See method of calculation for the above on pages 6-9, 20)

Step 4. Based on the information just summarized and the total entries calculated, the number of pages and volumes in the Third Union Catalog was derived.

## SUMMARY

Number of characters per average complete DBPH main entry as formatted on the page = 676
Number of characters per average complete non-DBPH main entry as formatted on the page = 483
Number of characters per average index entry in the Author/Title sort = 53

Number of characters per average index entry in the Subject Heading Index = 53
Number of characters per average index entry in the Narrator Index = 85
Number of characters per average index entry in the Dewey Number Index = 60
(See method of calculation for the above on pages 8-10)

## SUMMARY

Number of lines required for the complete DBPH main entry = 17
Number of lines required for the complete non-DBPH main entry = 12
Number of lines required for title index entries in the Author/Title sort = 4
Number of lines required for entries in the Subject Heading Index = 5
Number of lines required for entries in the DBPH Book Number Index = 4
Number of lines required for entries in the Narrator Index = 5
Number of lines required for entries in the Dewey Number Index = 5
(See method of calculation for the above on pages 10-12)

## SUMMARY

Number of DBPH main entries per page = 12
Number of non-DBPH main entries per page = 18
Number of title index entries per page = 60
Number of subject index entries per page = 48
Number of DBPH book number index entries per page = 60
Number of narrator index entries per page = 48
Number of Dewey number index entries per page = 48
(See method of calculation for the above on pages 12-14)

## SUMMARY

Number of pages in the Author/Title sort =14,785
Total number of pages in the 4 indices =12,711
(See method of calculation for the above on page 30)

## SUMMARY

Total number of volumes for the Second Union Catalog = 32

Author/Title Volumes = 17
Index Volumes = 15
(See method of calculation for the above on page 15)

Step 5. The total cost of the Third Union Catalog was figured on the basis of production of 500 sets. The distribution of these sets, again subject to necessary adjustments, would be the same as that for the First Union Catalog. (See page 23 for distribution).

## SUMMARY

It should cost $256,000 to produce 500 sets of the Third Union Catalog. (See page 17 for method of calculation)

## MICROFORM PRODUCTS

In addition to providing a print version of the Union Catalog, it is recommended that a microform version be produced. Furthermore, monthly microform updates of the in-process file should also be prepared. In order to judge whether a microfiche or a microfilm version of these products is preferable, the advantages and disadvantages of each form were considered.

## MICROFICHE vs. MICROFILM

A. Microfiche

1. Advantages:

   a. Microfiche can be easily and inexpensively duplicated allowing replacement of missing or damaged items by DBPH and/or the multi-state centers. This could be done on relatively inexpensive equipment.

   b. Microfiche can be mailed in regular correspondence envelopes by first class mail in order to increase the probability of prompt delivery.

   c. Microfiche requires less storage space than microfilm.

   d. It is easier to refer from indices to main body on microfiche in cases where the size of the product would exceed 1 role of film.

   e. Compared to microfilm readers, microfiche readers are inexpensive and portable.

2. Disadvantages:

   a. Microfiche holds fewer frames than microfilm.

   b. Microfiche is easier to misplace or misfile.

### B. Microfilm

1. Advantages:
   - a. Microfilm is easier to scan since it holds nearly 1,000 images.
   - b. Since the Union Catalog would require fewer rolls of film than fiche cards, microfilm would be easier to store and lable.
2. Disadvantages:
   - a. Loading and unloading of microfilm and scanning for a specific frame is cumbersome. This is especially true where main body and indices require referral from reel to reel.
   - b. Microfilm readers cost a good deal more than microfiche readers.

## MICROFICHE vs. MICROFILM READERS

In order to illustrate the qualities required in a microfiche or microfilm reader and the resultant costs, the following specifications and prices were obtained.

### A. Microfiche

1. Requirements
   - a. Large reading screen
   - b. Accurate frame finder
   - c. Quality lens system
   - d. Portability
   - e. Even distribution of light
2. Examples

|  | Manufacturers | Model Series |
|---|---|---|
| a. | Washington Scientific Corp. | Mini-Cat |
| b. | Realist Corporation | Vantage |
| c. | Bell and Howell, Inc. | Briefcase |
| d. | Microbra Corporation | Escort |

### 3. Cost

Average cost of microfiche reader in quality desired = $140.

#### a. Cost for DBPH

| | |
|---|---|
| Average cost of reader | $ 140 |
| Minimum DBPH requirements | x 40 |
| Total cost | $5,600 |

#### b. Cost for Network

| | |
|---|---|
| Average cost of reader | $ 140 |
| Minimum network needs (1 per Library) | x106 |
| Total cost | $14,840 |
| Total overall cost | $20,440 |

## B. Microfilm

### 1. Requirements

a. Large reading screen
b. Motorized drive
c. Movable glass flats
d. Quality lens system
e. Even distribution of light

### 2. Examples

| Manufacturers | Model Series |
|---|---|
| a. 3M Company | 400M |
| b. Xerox Corporation | 1212 |
| c. Information Design | ID-201 |
| d. Eastman Kodak | Recordak 310A |

### 3. Cost

Average cost of the microfilm reader in the quality desired = $1,000

a. Cost for DBPH

| | |
|---|---|
| Average cost of reader | $ 1,000 |
| Minimum DBPH requirements | x 40 |
| Total cost | $40,000 |

b. Cost for Network

| | |
|---|---|
| Average cost of reader | $ 1,000 |
| Minimum network needs (1 per library) | x 106 |
| Total cost | $106,000 |
| Total overall cost | $146,000 |

## RECOMMENDED MICROFORM

It is recommended that DBPH choose microfiche for their bibliographic products for the following reasons:

1. The size of the Union Catalog and its divisions into 5 inter-related segments would make searching for a bibliographic record more difficult by film than by fiche.
2. It is easy and fairly inexpensive to duplicate fiche in case of loss or damage.
3. The cost for an adequate quality microfilm reader is significantly greater than that for a microfiche reader.

## REDUCTION RATIOS

Having decided to use microfiche, 3 reduction ratios for the fiche are possible, 42x, 48x, and 24x. The reduction ratio determines how many times the page image is reduced and is inversely proportional to resolution when the image is blown back on the reader screen. There is no substantial difference in cost for masters or copies between the various reduction ratios. The following table provides a summary of the most common microfiche formats for letters size (8-1/2 x 11") and computer paper (11 x 14"):

| Arranged For | Reduction | Columns | Rows | No. of Frames | |
|---|---|---|---|---|---|
| | | | | 8-1/2 x 11 | 11 x 14 |
| 8-1/2 x 11" | 24X | 14 | 7 | 98 | 49* |
| 11 x 14" | 24X | 9 | 7 | 63 | 63 |
| 8-1/2 x 11" | 42X | 25 | 13 | 325 | 156* |
| 11 x 14" | 42X | 16 | 13 | 208 | 208 |
| 8-1/2 x 11" | 48X | 28 | 15 | 420 | 210* |
| 11 x 14" | 48X | 18 | 15 | 270 | 270 |

*A single image occupies two frames

## A. 42X Reduction Ratio

### 1. Advantages

a. There are 325 frames or letter size pages and 208 frames or computer printout pages per fiche.
b. 42X is the current commercial standard for COM production accepted by the National Microfilm Association.
c. Loss of resolution can be easily overcome with a good lens system.
d. Standard microfiche readers can be used for 42X with only slight modification of the lens system normally provided.

### 2. Disadvantages

a. This resolution could cause eye strain depending on the quality of the reader used.
b. Libraries that presently own equipment with a 24X lens would have to purchase a 42X lens.

## B. 48X Reduction Ratio (Experimental)

### 1. Advantages

a. There are 420 frames or letter size pages and 270 frames or computer size pages per fiche.

b. The significant increase in frames per fiche reduces the number of fiche needed and, therefore, the overall cost.

### 2. Disadvantages

a. This resolution could cause eye strain due to lack of quality control and resolution.

b. Reduction of the print type to this small a size will necessitate a larger point size typeface; and therefore, additional programming and Videocomp processing.

c. There are fewer readers capable of blowing back 48X microfiche into a readable format.

d. There are no overall industry standards for 48X. GPO is still experimenting with this reduction ratio without achieving satisfactory results as yet.

## C. 24X Reduction Ratio

### 1. Advantages

a. 24X is the current commercial and government standard for planetary camera production of microfiche.

b. This has the highest resolution of the reduction ratios; and, therefore, eye strain is minimized.

c. Almost all microfiche readers have 24X lens as standard equipment.

d. The Library of Congress could purchase an inexpensive planetary camera to process its own microfiche masters.

### 2. Disadvantages

a. There are only 98 frames of letter size pages and 63 frames or computer size pages per fiche.

b. This reduction ratio holds so few frames per fiche that the quantity would become inconvenient to store.

c. The great number of fiche would make searching for bibliographic records very cumbersome.

d. The cost for production at 24X would be greater than at any other reduction ratio.

## RECOMMENDED REDUCTION RATIO

42X reduction ratio is recommended for these reasons:

1. The large number of frames per fiche reduces the total number of fiche required and, therefore, the necessary storage.
2. The large number of frames per fiche reduces duplicating costs.
3. 42X is rapidly replacing 24X as the commercial and government standard.
4. If a library presently has a reader with a removable lens for 24X microfiche, a 42X can be purchased and the reader used without any other modification.

# UNION CATALOG

## MICROFICHE VERSION

In order to determine the number of fiche required for the Union Catalog and the cost of this product, Remac Information Corporation, a leading microform service bureau, was consulted. Since the three (3) columns, 6-point type size pages produced from the Videocomp for the print catalog could not be blown up on a screen at 42X with sufficient resolution, it will be necessary to go through a second run on the Videocomp in order to produce 8-1/2 x 11-inch pages in 2 columns and 8-point type. These pages can then be filmed at 42X on the Documate II camera, which is available through several local service bureaus. According to Remac Information Corporation this will increase the number of pages required for each catalog by approximately 17 percent. The steps following the charts were completed in order to calculate what this would do to the size and cost of the microfiche Union Catalog.

## SCHEDULE--UNION CATALOG

## MICROFICHE VERSION

| Title | Last Entry Date | Date Issued | Charged To | Contents | | Total Cost |
|---|---|---|---|---|---|---|
| First Union Catalog | Dec. 31, 1975 | May 1976 | Fiscal Year 1976 | DBPH retrospective mass produced titles = 12,000 | | $ 2,170 |
| | | | | DBPH retrospective limited production titles = 21,815 | | |
| | | | | DBPH mass and limited production titles completed after June 1974 = 2,632 | | |
| | | | | Grand Total | 36,447 | |
| | | | | Less duplicates | 4,010 | |
| | | | | Actual main entries | 32,437 | |
| | | | | Grand Total Fiscal Year 1976 | | $ 2,170 |

## SCHEDULE--UNION CATALOG

## MICROFICHE VERSION

| Title | Last Entry Date | Date Issued | Charged To | Contents | Total Cost |
|---|---|---|---|---|---|
| Second Union Catalog | Dec. 31, 1976 | May 1977 | Fiscal Year 1977 | Actual main entries from the First Union Catalog = 32,438<br>DBPH mass and limited production titles issued between January 2, 1976, and December 31, 1976 = 2,550<br>Titles from the regional library network = 49,051<br>Titles from affiliated agencies (APH-IMRC and RFP) = 55,325<br>Grand Total 139,364<br>Less duplicates 5,017<br>Actual main entries 32,437 | $ 6,536 |
|  |  |  |  | Grand Total Fiscal Year 1977 | $ 6,536 |

## SCHEDULE--UNION CATALOG

## MICROFICHE VERSION

| Title | Last Entry Date | Date Issued | Charged To | Contents | Total Cost |
|---|---|---|---|---|---|
| Third Union Catalog | Dec. 31, 1977 | May 1978 | Fiscal Year 1978 | Actual main entries from the Second Union Catalog = 134,347 | $ 8,600 |
| | | | | DBPH mass and limited production titles issued between January 2, 1977, and December 31, 1977 = 2,835 | |
| | | | | Titles from the regional library network = 1,500 | |
| | | | | Titles from 32 affiliated agencies = 52,500 | |
| | | | | Grand Total 191,182 | |
| | | | | Grand Total Fiscal Year 1978 | $ 8,600 |

Step 1.

The first figure derived in calculating the cost of the catalog was the number of pages and hence fiche required for the annual version. A 17 percent increase in the page count was calculated using the base figures arrived at for the print Union Catalog. A microfiche version of the first working document will not be provided; therefore, no calculations were completed for it.

| Document Title | Calculations | |
|---|---|---|
| First Union Catalog | 3,233 | Pages in print author/title sort |
| | X .17 | Percentage of page count increase |
| | 549.61 | Increase in page count |
| | 3,233 | Pages in print author/title sort |
| | + 550 | Increase in page count |
| | 3,783 | Pages in microfiche author/title sort |
| | 5,196 | Pages in print indices |
| | X .17 | Percentage of page count increase |
| | 883.32 | Increase in page count |
| | 5,196 | Pages in print indices |
| | + 883 | Increase in page count |
| | 6,079 | Pages in microfiche indices |
| Second Union Catalog | 10,623 | Pages in print author/title sort |
| | X .17 | Percentage of page count increase |
| | 1,805.91 | Increase in page count |
| | 10,623 | Pages in print author/title sort |
| | +1,806 | Increase in page count |
| | 12,429 | Pages in microfiche author/title sort |
| | 10,107 | Pages in print indices |
| | X .17 | Percentage of page count increase |
| | 1,718.19 | Increase in page count |
| | 10,107 | Pages in print indices |
| | +1,718 | Increase in page count |
| | 11,825 | Pages in microfiche indices |

### Step 1 (cont'd)

**Third Union Catalog**

| | |
|---|---|
| 14,785 | Pages in print author/title sort |
| X .17 | Percentage of page count increase |
| 2,513.45 | Increase in page count |
| 14,785 | Pages in print author/title sort |
| +2,513 | Increase in page count |
| 17,298 | Pages in microfiche author/title sort |
| 12,711 | Pages in print indices |
| X .17 | Percentage of page count increase |
| 2,160.87 | Increase in page count |
| 12,711 | Pages in print indices |
| +2,161 | Increase in page increase |
| 14,872 | Pages in microfiche indices |

## SUMMARY

### First Union Catalog

Pages in microfiche author/title sort = 3,783
Pages in microfiche indices = 6,079

### Second Union Catalog

Pages in microfiche author/title sort = 12,429
Pages in microfiche indices = 11,825

### Third Union Catalog

Pages in microfiche author/title sort = 17,298
Pages in microfiche indices = 14,872

As stated previsously, the industry COM standard permits 325 letter size pages per fiche at 42 X allowing for appropriate headers. Therefore, each catalog would require the following number of fiche.

Step 1 (cont'd)

| Document Title | Calculations |
|---|---|
| First Union Catalog | 11.64 Fiche for author/title sort<br>325/3,783 Pages for author/title sorts<br>pages/fiche |
| | 18.70 Fiche for indices<br>325/6,079 Pages for indices<br>pages/fiche |
| Second Union Catalog | 38.24 Fiche for author/title sort<br>325/12,429 Pages for author/title sort<br>pages/fiche |
| | 36.381 Fiche for indices<br>325/11,825 Pages for indices<br>pages/fiche |
| Third Union Catalog | 53.22 Fiche for author/title sort<br>325/17,298 Pages for author/title sort<br>pages/fiche |
| | 45.76 Fiche for indices<br>325/14,872 Pages for indices<br>pages/fiche |

## SUMMARY

First Union Catalog

Fiche for author/title sort = 12
Fiche for indices = 19
Total = 31

Second Union Catalog

Fiche for author/title sort = 39
Fiche for indices = 37
Total = 76

Third Union Catalog

Fiche for author/title sort = 54
Fiche for indices = 46
Total = 100

Step 2.

Having determined the number of fiche required for each catalog, the cost of each can be derived. According to Remac Information Corporation cost for microfiche production varies from company to company, but a $16.00 per fiche charge for production of the master and a 12¢ (1,000 copies) to 14¢ (500 copies) per fiche charge for production of a copy would be an average commercial cost. In addition, most commercial producers would provide working masters at their own expense. Given these figures, the cost of the catalog was determined. It was assumed that there would be 500 copies with a distribution as follows; however, the cost for 1,000 copies was also calculated. The annual version of the catalog in microfiche has potential for distribution outside of the network as well as in multi-copies within it. Therefore, should funds permit, 1,000 copies would be desirable. The number of copies and issue data could change depending on input from users.

| | | |
|---|---|---|
| DBPH | | 40 |
| Office of the Chief | 2 | |
| Project Coordination Office | 4 | |
| Office Services | 1 | |
| Publication Services | 1 | |
| Building Services | 0 | |
| Materials Development Office | 2 | |
| Collection Development Section | 6 | |
| Processing Section | 6 | |
| Production Section | 4 | |
| Technical Section | 1 | |
| Network Development Office | 2 | |
| Reference | 2 | |
| Music | 1 | |
| Volunteer Training Section | 0 | |
| Volunteer Utilization Section | 1 | |
| Network Services Section | 1 | |
| Resources Coordination Unit | 5 | |
| Circulation and Collection Maintenance Unit | 1 | |
| Multistate Centers (5 each) | | 10 |
| Regional Libraries (4 X 54) | | 216 |
| Subregional Libraries (2 X 102) | | 204 |
| Reserve | | 30 |
| Total | | 500 |

## 500 COPIES

| Document Title | Calculations | |
|---|---|---|
| First Union Catalog | 31 | Total number of fiche |
| | X 16 | Cost per master |
| | $496 | Cost for masters |
| | 31 | Total number of fiche |
| | X .14 | Cost per copy |
| | $4.34 | Cost for 1 copy |
| | $ 4.34 | Cost for 1 copy |
| | X 500 | Number of copies |
| | $2,170 | Cost for 500 copies |
| | 496 | Cost for masters |
| | +2,170 | Cost for 500 masters |
| | $2,666 | Total cost |
| Second Union Catalog | 76 | Total number of fiche |
| | X 16 | Cost per master |
| | $1,216 | Cost for masters |
| | 76 | Total number of fiche |
| | X .14 | Cost per copy |
| | $10.64 | Cost for 1 copy |
| | 10.64 | Cost for 1 copy |
| | X 500 | Number of copies |
| | $5,320 | Cost for 500 copies |
| | 1,216 | Cost for masters |
| | +5,320 | Cost for 500 copies |
| | $6,536 | Total Cost |
| Third Union Catalog | 100 | Total number of fiche |
| | X 16 | Cost per master |
| | $1,600 | Cost for masters |

## 500 COPIES (cont'd)

| Document Title | Calculations | |
|---|---|---|
| Third Union Catalog (cont'd) | 100 | Total number of fiche |
| | X.14 | Cost per copy |
| | $ 14 | Cost for one copy |
| | 14 | Cost for 1 copy |
| | X 500 | Number of copies |
| | $7,000 | Cost for 500 copies |
| | 1,600 | Cost for masters |
| | +7,000 | Cost for 500 copies |
| | $8,600 | Total cost |

## 1000 COPIES

| Document Title | Calculations | |
|---|---|---|
| First Union Catalog | 31 | Total number of fiche |
| | X 16 | Cost per master |
| | $496 | Cost for masters |
| | 31 | Total number of fiche |
| | X .12 | Cost per copy |
| | $3.72 | Cost for 1 copy |
| | 3.72 | Cost for 1 copy |
| | X1,000 | Number of copies |
| | $3,720 | Cost for 1,000 copies |
| | 496 | Cost for masters |
| | +3,720 | Cost for 1,000 copies |
| | $4,216 | Total Cost |
| Second Union Catalog | 76 | Total number of fiche |
| | X 16 | Cost per master |
| | $1,216 | Cost for masters |
| | 76 | Total number of fiche |
| | X .12 | Cost per copy |
| | $9.12 | Cost for 1 copy |
| | 9.12 | Cost for 1 copy |
| | X1,000 | Number of copies |
| | $9,120 | Cost for 1,000 copies |
| | 1,216 | Cost for masters |
| | + 9,120 | Cost for 1,000 copies |
| | $10,336 | Total Cost |
| Third Union Catalog | 100 | Total number of fiche |
| | X 16 | Cost per master |
| | $1,600 | Cost for masters |
| | 100 | Total number of fiche |
| | X.12 | Cost per copy |
| | $ 12 | Cost for 1 copy |

## 1000 COPIES (cont'd)

| Document Title | Calculations | |
|---|---|---|
| Third Union Catalog (cont'd) | 12 | Cost for 1 copy |
| | X 1,000 | Number of copies |
| | $12,000 | Cost for 1,000 copies |
| | 1,600 | Cost for masters |
| | +12,000 | Cost for 1,000 copies |
| | $13,600 | Total cost |

## SUMMARY

| First Union Catalog | |
|---|---|
| 500 copies | $ 2,170 |
| 1,000 copies | 4,216 |

| Second Union Catalog | |
|---|---|
| 500 copies | $ 6,536 |
| 1,000 copies | $10,336 |

| Third Union Catalog | |
|---|---|
| 500 copies | $ 8,600 |
| 1,000 copies | $13,600 |

## UNION CATALOG MONTHLY UPDATES MICROFICHE

In addition to providing the annual version of the Union Catalog on microfiche, it is recommended that DBPH provide monthly updates on microfiche. These updates should include all titles added since production of the previous Union Catalog and should cumulate monthly. The format would be identical to that of the Union Catalog with 4 indices in addition to the Author/Title sort. Entries for each sort and index should be interfiled with items from previous months. There should be 12 cumulations produced each year until such time as the entire annual Union Catalog can be cumulated, produced, and distributed within a month of the eleventh monthly cumulation. See charts on Union Catalog Monthly Updates, Microfiche (D-55 through D-57).

The following steps were completed to arrive at the cost of this production:

Step 1.

In order to determine the cost of the monthly updates to the Union Catalog, it was first necessary to arrive at the number of items added each month, the number of pages required for the items, and the number of fiche required for the pages. Basic information concerning the number of titles was obtained from the Selection Section, DBPH, assuming a start date of January, 1977.

The current production projections for DBPH are as follows:

| Fiscal Year | Projected DBPH Production |
|---|---|
| 1977 | 2,700 |
| 1978 | 3,240 |

New additions to the collections of the network libraries and two affiliated agencies (APH-IMRC and RFF) should also be included in the monthly updates at this point. According to the Selections Section, they received 1,326 copyright requests from the network between April 1974 and March 1975. In order to allow for growth and to cover the 1% of titles for which clearances are requested but not granted, the figure for the network was increased to 1,500 items. According to APH-IMRC, they add approximately 10,000 titles per year of which 4,050 titles are texts from RFB. In addition RFP would contribute 450 titles that are not texts. Thus, total non-DBPH additions are as follows:

| Fiscal Year | Projected non-DBPH Production | |
|---|---|---|
| 1977 | 1,500 | Network Titles |
| | 10,000 | APH-IMRC Titles |
| | + 450 | RFB Titles |
| | $11,950 | Annual Additions |

## UNION CATALOG - MONTHLY UPDATES

## MICROFICHE

| Month | Last Entry Date | Issue Date | Charged To | Number of Entries and Fiche | Cost |
|---|---|---|---|---|---|
| Updates - January 1977 | Last working day of the month | Second week of the month | Fiscal Year 1977 | 1221 Titles on 1 Fiche | $ 86 |
| Updates - February 1977 | Same as above | Same as above | Fiscal Year 1977 | 2442 Titles on 2 Fiche | $172 |
| Updates - March 1977 | Same as above | Same as above | Fiscal Year 1977 | 3663 Titles on 2 Fiche | $172 |
| Updates - April 1977 | Same as above | Same as above | Fiscal Year 1977 | 4884 Titles on 3 Fiche | $258 |
| Updates - May 1977 | Same as above | Same as above | Fiscal Year 1977 | 6105 Titles on 4 Fiche | $344 |
| Updates - June 1977 | Same as above | Same as above | Fiscal Year 1977 | 7326 Titles on 4 Fiche | $344 |

## UNION CATALOG - MONTHLY UPDATES

## MICROFICHE (cont'd)

| Month | Last Entry Date | Issue Date | Charged To | Number of Entries and Fiche | Cost |
|---|---|---|---|---|---|
| Updates - July 1977 | Last working day of the month | Second week of the month | Fiscal Year 1977 | 8547 Titles on 5 Fiche | $430 |
| Updates - August 1977 | Same as above | Same as above | Fiscal Year 1977 | 9768 Titles on 5 Fiche | $430 |
| Updates - September 1977 | Same as above | Same as above | Fiscal Year 1977 | 10989 Titles on 6 Fiche | $516 |
|  |  |  |  | Grand Total Fiscal Year 1977 | $2752 |

## UNION CATALOG - MONTHLY UPDATES

## MICROFICHE (cont'd)

| | | | | | |
|---|---|---|---|---|---|
| Updates - October 1977 | Same as above | Same as above | Fiscal Year 1978 | 12255 Titles on 7 Fiche | $602 |
| Updates - November 1977 | Same as above | Same as above | Fiscal Year 1978 | 13521 Titles on 7 Fiche | $602 |
| Updates - December 1977 | Same as above | Same as above | Fiscal Year 1978 | 14787 Titles on 8 Fiche | $688 |
| | | | | Partial Total Fiscal Year 1978 | $1892 |

| Fiscal Year | Projected non-DBPH Production | |
|---|---|---|
| 1978 | 1,500 | Network Titles |
| | 10,000 | APH-IMRC Titles |
| | + 450 | RFB Titles |
| | $11,950 | |

To ascertain the number of titles that should be added during the calendar year 1977, the following calculations were completed:

January 1977 to December 1977
Fiscal Years 1977, 1978

DBPH Production
Calendar Year 1977

| | |
|---|---|
| 2,700 | DBPH production, Fiscal 1977 |
| X.75 | % of production included |
| 2,025 | Number of Fiscal 1977 titles included |

| | |
|---|---|
| 3,240 | DBPH production, Fiscal 1978 |
| X.25 | % of production included |
| 810 | Number of Fiscal 1978 titles included |

Non-DBPH Production
Calendar Year 1977

| | |
|---|---|
| 11,950 | Non-DBPH production, Fiscal 1977 |
| X .75 | % of production included |
| 8,962.5 | Number of Fiscal 1977 titles included |

225 Production per month
9|2,025 DBPH Production Fiscal 1977
Number of months included

270 Production per month
3|810 DBPH Production Fiscal 1978
Number of months included

995.88 Production per month
9|8,963 Non-DBPH Production Fiscal 1977
Number of months included

996 Production per month
3|2,988 Non-DBPH Production Fiscal 1978
Number of months included

## Number of Main Entries

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 | January | 225 | DBPH main entries |
| | | 996 | Non-DBPH main entries |
| | February | 225 | January DBPH main entries |
| | | +225 | Additions |
| | | 450 | DBPH main entries |
| | | 996 | January non-DBPH main entries |
| | | +996 | Additions |
| | | 1,992 | Non-DBPH main entries |
| | March | 1,992 | February non-DBPH main entries |
| | | + 996 | Additions |
| | | 3,984 | Non-DBPH main entries |
| | May | 900 | April DBPH main entries |
| | | +225 | Additions |
| | | 1,125 | DBPH main entries |
| | | 3,984 | April non-DBPH main entries |
| | | +996 | Additions |
| | | 4,980 | Non-DBPH main entries |
| | June | 1,125 | May DBPH main entries |
| | | + 225 | Additions |
| | | 1,350 | DBPH main entries |
| | | 4,980 | May non-DBPH main entries |
| | | +996 | Additions |
| | | 5,976 | Non-DBPH main entries |
| | July | 1,350 | June DBPH main entries |
| | | +225 | Additions |
| | | 1,575 | DBPH main entries |
| | | 5,976 | June non-DBPH main entries |
| | | +996 | Additions |
| | | 6,972 | Non-DBPH main entries |

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 (cont'd) | August | 1,575 | July DBPH main entries |
| | | +225 | Additions |
| | | 1,800 | DBPH main entries |
| | | 6,972 | July non-DBPH main entries |
| | | +996 | Additions |
| | | 7,968 | Non-DBPH main entries |
| | September | 1,800 | August DBPH main entries |
| | | +225 | Additions |
| | | 2,025 | DBPH main entries |
| | | 7,968 | August non-DBPH main entries |
| | | +996 | Additions |
| | | 8,964 | Non-DBPH main entries |
| 1978 | October | 2,025 | September DBPH main entries |
| | | +270 | Additions |
| | | 2,295 | DBPH main entries |
| | | 8,964 | September non-DBPH main entries |
| | | +996 | Additions |
| | | 9,960 | Non-DBPH main entries |
| | November | 2,295 | October DBPH main entries |
| | | +270 | Additions |
| | | 2,565 | DBPH main entries |
| | | 9,960 | October non-DBPH main entries |
| | | +996 | Additions |
| | | 10,956 | Non-DBPH main entries |
| | December | 2,565 | November DBPH main entries |
| | | +270 | Additions |
| | | 2,835 | DBPH main entries |
| | | 10,956 | November non-DBPH main entries |
| | | +996 | Additions |
| | | 11,952 | Non-DBPH main entries |

## SUMMARY

| | | |
|---|---|---|
| Number of main entries, January: | | |
| DBPH | 225 | |
| Non-DBPH | 996 | Total 1,221 |
| Number of main entries, February: | | |
| DBPH | 450 | |
| Non-DBPH | 1,992 | Total 2,442 |
| Number of main entries, March: | | |
| DBPH | 675 | |
| Non-DBPH | 2,988 | Total 3,663 |
| Number of main entries, April: | | |
| DBPH | 900 | |
| Non-DBPH | 3,984 | Total 4,884 |
| Number of main entries, May: | | |
| DBPH | 1,125 | |
| Non-DBPH | 4,980 | Total 6,105 |
| Number of main entries, June: | | |
| DBPH | 1,350 | |
| Non-DBPH | 5,976 | Total 7,326 |
| Number of main entries, July: | | |
| DBPH | 1,575 | |
| Non-DBPH | 6,972 | Total 8,547 |
| Number of main entries, August: | | |
| DBPH | 1,800 | |
| Non-DBPH | 7,968 | Total 9,768 |
| Number of main entries, September: | | |
| DBPH | 2,025 | |
| Non-DBPH | 8,964 | Total 10,989 |
| Number of main entries, October: | | |
| DBPH | 2,295 | |
| Non-DBPH | 9,960 | Total 12,255 |

Number of main entries, November:
DBPH 2,565
Non-DBPH 10,956 Total 13,521

Number of main entries, December:
DBPH 2,835
Non-DBPH 11,952 Total 14,787

## NUMBER OF INDEX ENTRIES

### TITLE INDEX

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 | January | 1,221 | Total entries |
| | | x.023 | % of title main entries |
| | | 28.083 | Number of title main entries |
| | | 1,221 | Total entries |
| | | - 28 | Number of title main entries |
| | | 1,193 | Number of title index entries |
| | February | 2,442 | Total entries |
| | | x.023 | % of title main entries |
| | | 56.166 | Number of title main entries |
| | | 2,442 | Total entries |
| | | - 56 | Number of title main entries |
| | | 2,386 | Number of title index entries |
| | March | 3,663 | Total entries |
| | | x.023 | % of title main entries |
| | | 84.249 | Number of title main entries |
| | | 3,663 | Total entries |
| | | - 84 | Number of title main entries |
| | | 3,579 | Number of title index entries |
| | April | 4,884 | Total entries |
| | | x.023 | % of title main entries |
| | | 112.332 | Number of title main entries |

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 (cont'd) | | 4,884 | Total entries |
| | | - 112 | Number of title main entries |
| | | 4,772 | Number of title index entries |
| | May | 6,105 | Total entries |
| | | x.023 | % of title main entries |
| | | 140.415 | Number of title main entries |
| | | 6,105 | Total entries |
| | | - 140 | Number of title main entries |
| | | 5,965 | Number of title index entries |
| | June | 7,326 | Total entries |
| | | x.023 | % of title main entries |
| | | 168.498 | Number of title main entries |
| | | 7,326 | Total entries |
| | | - 168 | Number of title main entries |
| | | 7,158 | Number of title index entries |
| | July | 8,547 | Total entries |
| | | x.023 | % of title main entries |
| | | 196.581 | Number of title main entries |
| | | 8,547 | Total entries |
| | | - 197 | Number of title main entries |
| | | 8,350 | Number of title index entries |
| | August | 9,768 | Total entries |
| | | x.023 | % of title main entries |
| | | 224.664 | Number of title main entries |
| | | 9,768 | Total entries |
| | | - 225 | Number of title main entries |
| | | 9,543 | Number of title index entries |
| | September | 10,989 | Total entries |
| | | x.023 | % of title main entries |
| | | 252.747 | Number of title main entries |
| | | 10,989 | Total entries |
| | | - 253 | Number of title main entries |
| | | 10,736 | Number of title index entries |

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1978 | October | 12,225 | Total entries |
| | | x.023 | % of title main entries |
| | | 281.865 | Number of title main entries |
| | | 12,225 | Total entries |
| | | - 282 | Number of title main entries |
| | | 11,973 | Number of title index entries |
| | November | 13,521 | Total entries |
| | | x.023 | % of title main entries |
| | | 310.983 | Number of title main entries |
| | | 13,521 | Total entries |
| | | - 311 | Number of title main entries |
| | | 13,210 | Number of title index entries |
| | December | 14,787 | Total entries |
| | | x.023 | % of title main entries |
| | | 340.101 | Number of title main entries |
| | | 14,787 | Total entries |
| | | - 340 | Number of title main entries |
| | | 14,447 | Number of title index entries |

## SUMMARY

Number of title index entries in the Author/Title sort:

| | | |
|---|---|---|
| January | 1,193 | Entries |
| February | 2,886 | |
| March | 3,579 | |
| April | 4,772 | |
| May | 5,965 | |
| June | 7,158 | |
| July | 8,350 | |
| August | 9,543 | |
| September | 10,736 | |
| October | 11,973 | |
| November | 13,210 | |
| December | 14,447 | |

# SUBJECT HEADING INDEX

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 | January | 225 | DBPH main entries |
| | | x5.18* | Subject headings per title |
| | | 1,165.5 | DBPH Subject Index entries |
| | | 125 | Network main entries |
| | | x1.6* | Subject headings per title |
| | | 200 | Network Subject Index entries |
| | | 871 | Agency main entries |
| | | x 1* | Subject headings per title |
| | | 871 | Agency Subject Index entries |
| | | 1,166 | DBPH Subject Index entries |
| | | 200 | Network Subject Index entries |
| | | + 871 | Agency Subject Index entries |
| | | 2,237 | Total entries |
| | February | 450 | DBPH main entries |
| | | x5.18 | Subject headings per title |
| | | 2,331 | DBPH subject headings per title |
| | | 250 | Network main entries |
| | | x1.6 | Subject headings per title |
| | | 400 | Network Subject Index entries |
| | | 1,742 | Agency main entries |
| | | x 1 | Subject headings per title |
| | | 1,742 | Agency Subject Index entries |
| | | 2,331 | DBPH Subject Index entries |
| | | 400 | Network Subject Index entries |
| | | +1,742 | Agency Subject Index entries |
| | | 4,473 | Total entries |

*Please see pages 7 and 26 for a description of how these figures were arrived at.

| Fiscal Year | Month | Calculcations | |
|---|---|---|---|
| 1977 (cont'd) | March | 675 | DBPH main entries |
| | | x5.18 | Subject headings per title |
| | | 3,496.5 | DBPH Subject Index entries |
| | | 375 | Network main entries |
| | | x1.6 | Subject headings per title |
| | | 600 | Network Subject Index entries |
| | | 2,613 | Agency main entries |
| | | x 1 | Subject headings per title |
| | | 2,613 | Agency Subject Index entries |
| | | 3,497 | DBPH Subject Index entries |
| | | 600 | Network Subject Index entries |
| | | +2,613 | Agency Subject Index entries |
| | | 6,710 | Total entries |
| | April | 900 | DBPH main entries |
| | | x5.18 | Subject headings per title |
| | | 4,662 | DBPH Subject Index entries |
| | | 500 | Network main entries |
| | | x1.6 | Subject headings per title |
| | | 800 | Network Subject Index entries |
| | | 3,484 | Agency main entries |
| | | x 1 | Subject headings per title |
| | | 3,484 | Agency Subject Index entries |
| | | 4,662 | DBPH Subject Index entries |
| | | 800 | Network Subject Index entries |
| | | +3,484 | Agency Subject Index entries |
| | | 8,946 | Total entries |
| | May | 1,125 | DBPH main entries |
| | | x5.18 | Subject headings per title |
| | | 5,827.5 | DBPH Subject Index entries |
| | | 625 | Network main entries |
| | | x1.6 | Subject headings per title |
| | | 1,000 | Network Subject index entries |
| | | 4,355 | Agency main entries |
| | | x 1 | Subject headings per title |
| | | 4,355 | Agency Subject Index entries |

| Fiscal Year | Month | | Calculations |
|---|---|---|---|
| 1977 (cont'd) | | 5,828 | DBPH Subject Index entries |
| | | 1,000 | Network Subject Index entries |
| | | +4,355 | Agency Subject Index entries |
| | | 11,183 | Total entries |
| | June | 1,350 | DBPH main entries |
| | | x5.18 | Subject headings per title |
| | | 6,993 | DBPH Subject Index entries |
| | | 750 | Network main entries |
| | | x1.6 | Subject headings per title |
| | | 1,200 | Network Subject Index entries |
| | | 5,226 | Agency main entries |
| | | x 1 | Subject headings per title |
| | | 5,226 | Agency Subject Index entries |
| | | 6,993 | DBPH Subject Index entries |
| | | 1,200 | Network Subject Index entries |
| | | +5,226 | Agency Subject Index entries |
| | | 13,419 | Total entries |
| | July | 1,575 | DBPH main entries |
| | | x5.18 | Subject headings per title |
| | | 8,158.5 | DBPH Subject Index entries |
| | | 875 | Network main entries |
| | | x1.6 | Subject headings per title |
| | | 1,400 | Network Subject Index entries |
| | | 6,097 | Agency main entries |
| | | x 1 | Subject headings per title |
| | | 6,097 | Agency Subject Index entries |
| | | 8,159 | DBPH Subject Index entries |
| | | 1,400 | Network Subject Index entries |
| | | +6,097 | Agency Subject Index entries |
| | | 15,656 | Total entries |
| | August | 1,800 | DBPH main entries |
| | | x5.18 | Subject headings per title |
| | | 9,324 | DBPH Subject Index entries |

| Fiscal Year | Month | Calculcations | |
|---|---|---|---|
| 1977 (cont'd) | | 1,000 | Network main entries |
| | | x1.6 | Subject headings per title |
| | | 1,600 | Network Subject Index entries |
| | | 6,968 | Agency main entries |
| | | x 1 | Subject headings per title |
| | | 6,968 | Agency Subject Index entries |
| | | 9,324 | DBPH Subject Index entries |
| | | 1,600 | Network Subject Index entries |
| | | +6,968 | Agency Subject Index entries |
| | | 17,892 | Total entries |
| | September | 2,025 | DBPH main entries |
| | | x5.18 | Subject headings per title |
| | | 10,489.5 | DBPH Subject Index entries |
| | | 1,125 | Network main entries |
| | | x1.6 | Subject headings per title |
| | | 1,800 | Network Subject Index entries |
| | | 7,839 | Agency main entries |
| | | x 1 | Subject headings per title |
| | | 7,839 | Agency Subject Index entries |
| | | 10,490 | DBPH Subject Index entries |
| | | 1,800 | Network Subject Index entries |
| | | +7,839 | Agency Subject Index entries |
| | | 20,129 | Total entries |
| 1978 | October | 2,295 | DBPH main entries |
| | | x5.18 | Subject headings per title |
| | | 11,888.1 | DBPH Subject Index entries |
| | | 1,250 | Network main entries |
| | | x1.6 | Subject headings per title |
| | | 2,000 | Network Subject Index entries |
| | | 8,710 | Agency main entries |
| | | x 1 | Subject headings per title |
| | | 8,710 | Agency Subject Index entries |

| Fiscal Year | Month | Calculcations | |
|---|---|---|---|
| 1978 (cont'd) | | 11,888 | DBPH Subject Index entries |
| | | 2,000 | Network Subject Index entries |
| | | +8,710 | Agency Subject Index entries |
| | | 22,598 | Total entries |
| | November | 2,565 | DBPH main entries |
| | | x5.18 | Subject headings per title |
| | | 13,286.7 | DBPH Subject Index entries |
| | | 1,375 | Network main entries |
| | | x1.6 | Subject headings per title |
| | | 2,200 | Network Subject Index entries |
| | | 9,581 | Agency main entries |
| | | x 1 | Subject headings per title |
| | | 9,581 | Agency Subject Index entries |
| | | 13,287 | DBPH Subject Index entries |
| | | 2,200 | Network Subject Index entries |
| | | +9,581 | Agency Subject Index entries |
| | | 25,068 | Total entries |
| | December | 2,835 | DBPH main entries |
| | | x5.18 | Subject headings per title |
| | | 14,685.3 | DBPH Subject Index entries |
| | | 1,500 | Network main entries |
| | | x1.6 | Subject headings per title |
| | | 2,400 | Network Subject Index entries |
| | | 10,452 | Agency main entries |
| | | x 1 | Subject headings per title |
| | | 10,452 | Agency Subject Index entries |
| | | 14,685 | DBPH Subject Index entries |
| | | 2,400 | Network Subject Index entries |
| | | +10,452 | Agency Subject Index entries |
| | | 27,537 | Total entries |

## SUMMARY

Number of Subject Index entries:

| | |
|---|---|
| January | 2,237 |
| February | 4,475 |
| March | 6,710 |
| April | 8,946 |
| May | 11,183 |
| June | 13,419 |
| July | 15,656 |
| August | 17,892 |
| September | 20,129 |
| October | 22,598 |
| November | 25,068 |
| December | 27,537 |

## DBPH BOOK NUMBER INDEX

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 | January | 225 | DBPH main entries |
| | | x 1 | Book numbers per item |
| | | 225 | Total entries |
| | February | 450 | DBPH main entries |
| | | x 1 | Book numbers per item |
| | | 450 | Total entries |
| | March | 675 | DBPH main entries |
| | | x 1 | Book numbers per item |
| | | 675 | Total entries |
| | April | 900 | DBPH main entries |
| | | x 1 | Book numbers per item |
| | | 900 | Total entries |
| | May | 1,125 | DBPH main entries |
| | | x 1 | Book numbers per item |
| | | 1,125 | Total entries |

| Fiscal Year | Month | | Calculcations |
|---|---|---|---|
| 1977 (cont'd) | June | 1,350 | DBPH main entries |
| | | x 1 | Book numbers per item |
| | | 1,350 | Total entries |
| | July | 1,575 | DBPH main entries |
| | | x 1 | Book numbers per item |
| | | 1,575 | Total entries |
| | August | 1,800 | DBPH main entries |
| | | x 1 | Book numbers per item |
| | | 1,800 | Total entries |
| | September | 2,025 | DBPH main entries |
| | | x 1 | Book numbers per item |
| | | 2,025 | Total entries |
| 1978 | October | 2,295 | DBPH main entries |
| | | x 1 | Book numbers per item |
| | | 2,295 | Total entries |
| | November | 2,565 | DBPH main entries |
| | | x 1 | Book numbers per item |
| | | 2,565 | Total entries |
| | December | 2,835 | DBPH main entries |
| | | x 1 | Book numbers per item |
| | | 2,835 | Total entries |

## SUMMARY

Number of DBPH Book Number Index entries:

| | |
|---|---|
| January | 225 |
| February | 450 |
| March | 675 |
| April | 900 |
| May | 1,125 |
| June | 1,350 |
| July | 1,575 |
| August | 1,800 |
| September | 2,025 |
| October | 2,295 |
| November | 2,565 |
| December | 2,835 |

# NARRATOR INDEX

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 | January | 225 | DBPH main entries |
| | | x.66 | Narrators per title |
| | | 148.5 | Total entries |
| | February | 450 | DBPH main entries |
| | | x.66 | Narrators per title |
| | | 297 | Total entries |
| | March | 675 | DBPH main entries |
| | | x.66 | Narrators per title |
| | | 445.5 | Total entries |
| | April | 900 | DBPH main entries |
| | | x.66 | Narrators per title |
| | | 594 | Total entries |
| | May | 1,125 | DBPH main entries |
| | | x.66 | Narrators per title |
| | | 742.5 | Total entries |
| | June | 1,350 | DBPH main entries |
| | | x.66 | Narrators per title |
| | | 891 | Total entries |
| | July | 1,575 | DBPH main entries |
| | | x.66 | Narrators per title |
| | | 1,039.5 | Total entries |
| | August | 1,800 | DBPH main entries |
| | | x.66 | Narrators per title |
| | | 1,188 | Total entries |
| | September | 2,025 | DBPH main entries |
| | | x.66 | Narrators per title |
| | | 1,336.5 | Total entries |

| Fiscal Year | Month | Calculcations | |
|---|---|---|---|
| 1978 | October | 2,295 | DBPH main entries |
| | | x.66 | Narrators per title |
| | | 1,514.7 | Total entries |
| | November | 2,565 | DBPH main entries |
| | | x.66 | Narrators per title |
| | | 1,692.9 | Total entries |
| | December | 2,835 | DBPH main entries |
| | | x.66 | Narrator per title |
| | | 1,871.1 | Total entries |

(See method of calculating narrators per title, page 27)

## SUMMARY

Number of Narrator Index entries:

| | |
|---|---|
| January | 149 |
| February | 297 |
| March | 446 |
| April | 594 |
| May | 743 |
| June | 891 |
| July | 1,040 |
| August | 1,188 |
| September | 1,337 |
| October | 1,515 |
| November | 1,693 |
| December | 1,871 |

## DEWEY NUMBER INDEX

The main entry figure used has been reduced by APH-IMRC's monthly production since they do not list Dewey numbers.

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 | January | 388 | Total main entries |
| | | x 1 | Dewey numbers per title |
| | | 388 | Total entries |

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 (cont'd) | February | 1,609 | Total main entries |
| | | x 1 | Dewey numbers per title |
| | | 1,609 | Total entries |
| | March | 2,830 | Total main entries |
| | | x 1 | Dewey numbers per title |
| | | 2,830 | Total entries |
| | April | 4,051 | Total main entries |
| | | x 1 | Dewey numbers per title |
| | | 4,051 | Total entries |
| | May | 5,272 | Total main entries |
| | | x 1 | Dewey numbers per title |
| | | 5,272 | Total entries |
| | June | 6,493 | Total main entries |
| | | x 1 | Dewey numbers per title |
| | | 6,493 | Total entries |
| | July | 7,714 | Total main entries |
| | | x 1 | Dewey numbers per title |
| | | 7,714 | Total entries |
| | August | 8,935 | Total main entries |
| | | x 1 | Dewey numbers per title |
| | | 8,935 | Total entries |
| | September | 10,156 | Total main entries |
| | | x 1 | Dewey numbers per title |
| | | 10,156 | Total entries |
| 1978 | October | 11,422 | Total main entries |
| | | x 1 | Dewey numbers per title |
| | | 11,422 | Total entries |
| | November | 12,688 | Total main entries |
| | | x 1 | Dewey numbers per title |
| | | 12,688 | Total entries |
| | December | 13,954 | Total main entries |
| | | x 1 | Dewey numbers per title |
| | | 13,954 | Total entries |

## SUMMARY

Number of Dewey Number Index entries:

| | |
|---|---|
| January | 388 |
| February | 1,609 |
| March | 2,830 |
| April | 4,051 |
| May | 5,272 |
| June | 6,493 |
| July | 7,714 |
| August | 8,935 |
| September | 10,156 |
| October | 11,422 |
| November | 12,688 |
| December | 13,954 |

Since the items just calculated will eventually become part of the Third Union Catalog, per page entry counts for each type of entry were taken from calculations for the print edition of the Third Union Catalog. Using these figures the following total page counts were derived:

## MAIN ENTRIES

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1977 | January | 18.75 Pages for DBPH entries<br>12 \| 225 DBPH main entries<br>DBPH main entries per page |
| | | 55.33 Pages for non-DBPH entries<br>18 \| 996 Non-DBPH main entries<br>non-DBPH main entries per page |
| | February | 37.5 Pages for DBPH entries<br>12 \| 450 DBPH main entries<br>DBPH main entries per page |

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1977<br>(cont'd) | February<br>(cont'd) | 110.66 Pages for non-DBPH entries<br>$18\overline{)1992}$ Non-DBPH main entries<br>non-DBPH main entries per page |
| | March | 56.25 Pages for DBPH entries<br>$12\overline{)675}$ DBPH main entries<br>DBPH main entries per page |
| | | 166 Pages for non-DBPH entries<br>$18\overline{)2988}$ Non-DBPH main entries<br>non-DBPH main entries per page |
| | April | 75 Pages for DBPH entries<br>$12\overline{)900}$ DBPH main entries<br>DBPH main entries per page |
| | | 221.33 Pages for non-DBPH entries<br>$18\overline{)3984}$ Non-DBPH main entries<br>non-DBPH main entries per page |
| | May | 93.75 Pages for DBPH entries<br>$12\overline{)1125}$ DBPH main entries<br>DBPH main entries per page |
| | | 276.66 Pages for non-DBPH entries<br>$18\overline{)4980}$ Non-DBPH main entries<br>non-DBPH main entries per page |
| | June | 112.5 Pages for DBPH entries<br>$12\overline{)1350}$ DBPH main entries<br>DBPH main entries per page |

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1977<br>(cont'd) | June<br>(cont'd) | 332 Pages for non-DBPH entries<br>18 )5976 Non-DBPH main entries<br>non-DBPH main<br>entries per page |
|  | July | 131.25 Pages for DBPH entries<br>12 )1575 DBPH main entries<br>DBPH main<br>entries per page |
|  |  | 387.33 Pages for non-DBPH entries<br>18 )6972 Non-DBPH main entries<br>non-DBPH main<br>entries per page |
|  | August | 150 Pages for DBPH entries<br>12 )1800 DBPH main entries<br>DBPH main<br>entries per page |
|  |  | 442.66 Pages for non-DBPH entries<br>18 )7968 Non-DBPH main entries<br>non-DBPH main<br>entries per page |
|  | September | 168.75 Pages for DBPH entries<br>12 )2025 DBPH main entries<br>DBPH main<br>entries per page |
|  |  | 498 Pages for non-DBPH entries<br>18 )8964 Non-DBPH main entries<br>non-DBPH main<br>entries per page |
| 1978 | October | 191.25 Pages for DBPH entries<br>12 )2295 DBPH main entries<br>DBPH main<br>entries per page |

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1978<br>(cont'd) | October<br>(cont'd) | 553.33 Pages for non-DBPH entries<br>18 ⟌ 9960 Non-DBPH main entries<br>non-DBPH main entries per page |
| | November | 213.75 Pages for DBPH entries<br>12 ⟌ 2565 DBPH main entries<br>DBPH main entries per page |
| | | 608.66 Pages for non-DBPH entries<br>18 ⟌ 10956 Non-DBPH main entries<br>non-DBPH main entries per page |
| | December | 236.25 Pages for DBPH entries<br>12 ⟌ 2835 DBPH main entries<br>DBPH main entries per page |
| | | 664 Pages for non-DBPH entries<br>18 ⟌ 11952 Non-DBPH main entries<br>non-DBPH main entries per page |

## SUMMARY

Pages required for main entries:

| | | | |
|---|---|---|---|
| January | DBPH | 19 | |
| | Non-DBPH | 56 | Total 75 |
| February | DBPH | 38 | |
| | Non-DBPH | 111 | Total 149 |
| March | DBPH | 57 | |
| | Non-DBPH | 166 | Total 223 |
| April | DBPH | 75 | |
| | Non-DBPH | 222 | Total 297 |

| | | | |
|---|---|---|---|
| May | DBPH | 94 | |
| | Non-DBPH | 277 | Total 371 |
| June | DBPH | 113 | |
| | Non-DBPH | 332 | Total 445 |
| July | DBPH | 132 | |
| | Non-DBPH | 388 | Total 520 |
| August | DBPH | 150 | |
| | Non-DBPH | 443 | Total 593 |
| September | DBPH | 169 | |
| | Non-DBPH | 498 | Total 667 |
| October | DBPH | 192 | |
| | Non-DBPH | 554 | Total 746 |
| November | DBPH | 214 | |
| | Non-DBPH | 609 | Total 823 |
| December | DBPH | 237 | |
| | Non-DBPH | 664 | Total 901 |

## TITLE ENTRIES

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1977 | January | 19.88 Pages<br>60 \| 1193 Title Index entries<br>Title index<br>entries per page |
| | February | 39.76 Pages<br>60 \| 2386 Title Index entries<br>Title index<br>entries per page |
| | March | 59.65 Pages<br>60 \| 3579 Title Index entries<br>Title index<br>entries per page |

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1977<br>(cont'd) | April | 79.53 Pages<br>$60\overline{)4772}$ Title Index entries<br>Title index<br>entries per page |
| | May | 99.41 Pages<br>$60\overline{)5965}$ Title Index entries<br>Title index<br>entries per page |
| | June | 119.3 Pages<br>$60\overline{)7158}$ Title Index entries<br>Title index<br>entries per page |
| | July | 139.16 Pages<br>$60\overline{)8350}$ Title Index entries<br>Title index<br>entries per page |
| | August | 159.05 Pages<br>$60\overline{)9543}$ Title Index entries<br>Title index<br>entries per page |
| | September | 178.93 Pages<br>$60\overline{)10736}$ Title Index entries<br>Title index<br>entries per page |
| 1978 | October | 199.55 Pages<br>$60\overline{)11973}$ Title Index entries<br>Title index<br>entries per page |
| | November | 220.16 Pages<br>$60\overline{)13210}$ Title Index entries<br>Title index<br>entries per page |

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1978<br>(cont'd) | December | 240.78 Pages<br>60⟌14447 Title Index entries<br>Title index<br>entries per page |

## SUMMARY

Pages required for title index entries:

| | |
|---|---|
| January | 20 |
| February | 40 |
| March | 60 |
| April | 80 |
| May | 100 |
| June | 120 |
| July | 140 |
| August | 160 |
| September | 179 |
| October | 200 |
| November | 221 |
| December | 241 |

## SUMMARY

Total pages required for Author/Title sort:

| | |
|---|---|
| January | 95 |
| February | 189 |
| March | 283 |
| April | 377 |
| May | 471 |
| June | 565 |
| July | 660 |
| August | 753 |
| September | 846 |
| October | 946 |
| November | 1,044 |
| December | 1,142 |

## SUBJECT HEADING INDEX

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1977 | January | 46.60 Pages<br>48 $\overline{)2237}$ Total entries<br>Entries<br>per page |
| | February | 93.18 Pages<br>48 $\overline{)4473}$ Total entries<br>Entries<br>per page |
| | March | 139.79 Pages<br>48 $\overline{)6710}$ Total entries<br>Entries<br>per page |
| | April | 186.37 Pages<br>48 $\overline{)8946}$ Total entries<br>Entries<br>per page |
| | May | 232.97 Pages<br>48 $\overline{)11183}$ Total entries<br>Entries<br>per page |
| | June | 279.56 Pages<br>48 13419 Total entries<br>Entries<br>per page |
| | July | 326.16 Pages<br>48 $\overline{)15656}$ Total entries<br>Entries<br>per page |
| | August | 372.75 Pages<br>48 $\overline{)17892}$ Total entries<br>Entries<br>per page |

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1977<br>(cont'd) | September | 419.35 Pages<br>$48\overline{)20129}$ Total entries<br>Entries<br>per page |
| 1978 | October | 470.79 Pages<br>$48\overline{)22598}$ Total entries<br>Entries<br>per page |
| | November | 522.25 Pages<br>$48\overline{)25068}$ Total entries<br>Entries<br>per page |
| | December | 573.68 Pages<br>$48\overline{)27537}$ Total entries<br>Entries<br>per page |

## SUMMARY

Pages required for Subject Heading Index:

| | |
|---|---|
| January | 47 |
| February | 94 |
| March | 140 |
| April | 187 |
| May | 233 |
| June | 280 |
| July | 327 |
| August | 373 |
| September | 420 |
| October | 471 |
| November | 523 |
| December | 574 |

DBPH Book Number Index

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1977 | January | 3.75 Pages<br>60 \|225 Total entries<br>Entries<br>per page |
| | February | 7.5 Pages<br>60 \|450 Total entries<br>Entries<br>per page |
| | March | 11.25 Pages<br>60 \|675 Total entries<br>Entries<br>per page |
| | April | 15 Pages<br>60 \|900 Total entries<br>Entries<br>per page |
| | May | 18.75 Pages<br>60 \|1125 Total entries<br>Entries<br>per page |
| | June | 22.5 Pages<br>60 \|1350 Total entries<br>Entries<br>per page |
| | July | 26.25 Pages<br>60 \|1575 Total entries<br>Entries<br>per page |
| | August | 30 Pages<br>60 \|1800 Total entries<br>Entries<br>per page |

## DBPH Book Number Index

| Fiscal Year | Month | |
|---|---|---|
| 1977 | September | 33.75 Pages<br>60 $\overline{)2025}$ Total entries<br>Entries<br>per page |
| 1978 | October | 38.25 Pages<br>60 $\overline{)2295}$ Total entries<br>Entries<br>per page |
| | November | 47.25 Pages<br>60 $\overline{)2835}$ Total entries<br>Entries<br>per page |
| | December | 47.25 Pages<br>60 $\overline{)2835}$ Total entries<br>Entries<br>per page |

### Summary

Pages required for DBPH Book Number Index:

| | |
|---|---|
| January | 4 |
| February | 8 |
| March | 12 |
| April | 15 |
| May | 19 |
| June | 23 |
| July | 27 |
| August | 30 |
| September | 34 |
| October | 39 |
| November | 43 |
| December | 48 |

### Narrator Index

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1977 | January | 3.10 Pages<br>48 $\overline{)149}$ Total entries<br>Entries<br>per page |

## Narrator Index

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1977 | February | 6.18 Pages<br>$48\,\overline{)297}$ Total entries<br>Entries<br>per page |
| | March | 9.29 Pages<br>$48\,\overline{)446}$ Total entries<br>Entries<br>per page |
| | April | 12.37 Pages<br>$48\,\overline{)594}$ Total entries<br>Entries<br>per page |
| | May | 15.47 Pages<br>$48\,\overline{)743}$ Total entries<br>Entries<br>per page |
| | June | 18.56 Pages<br>$48\,\overline{)891}$ Total entries<br>Entries<br>per page |
| | July | 21.66 Pages<br>$48\,\overline{)1040}$ Total entries<br>Entries<br>per page |
| | August | 24.75 Pages<br>$48\,\overline{)1188}$ Total entries<br>Entries<br>per page |
| | September | 27.85 Pages<br>$48\,\overline{)1337}$ Total entries<br>Entries<br>per page |

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1978 | October | 31.56 Pages<br>48 $\overline{)1515}$ Total entries<br>Entries<br>per page |
| | November | 35.27 Pages<br>48 $\overline{)1695}$ Total entries<br>Entries<br>per page |
| | December | 38.97 Pages<br>48 $\overline{)1871}$ Total entries<br>Entries<br>per page |

## Summary

Pages required for Narrator Index:

| | |
|---|---|
| January | 4 |
| February | 7 |
| March | 10 |
| April | 13 |
| May | 16 |
| June | 19 |
| July | 22 |
| August | 25 |
| September | 28 |
| October | 32 |
| November | 36 |
| December | 39 |

## Dewey Number Index

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1977 | January | 8.08 Pages<br>48 $\overline{)388}$ Total entries<br>Entries<br>per page |

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1977 (cont'd) | February | 33.52 Pages<br>48 ⟌1609 Total entries<br>Entries<br>per page |
| | March | 58.95 Pages<br>48 ⟌2830 Total entries<br>Entries<br>per page |
| | April | 84.39 Pages<br>48 ⟌4051 Total entries<br>Entries<br>per page |
| | May | 109.83 Pages<br>48 ⟌5272 Total entries<br>Entries<br>per page |
| | June | 135.27 Pages<br>48 ⟌6493 Total entries<br>Entries<br>per page |
| | July | 160.70 Pages<br>48 ⟌7714 Total entries<br>Entries<br>per page |
| | August | 186.14 Pages<br>48 ⟌8935 Total entries<br>Entries<br>per page |
| | September | 211.58 Pages<br>48 ⟌10156 Total entries<br>Entries<br>per page |

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1978 | October | 237.95 Pages<br>$48\,\overline{)11422}$ Total entries<br>Entries<br>per page |
| | November | 264.33 Pages<br>$48\,\overline{)12688}$ Total entries<br>Entries<br>per page |
| | December | 290.70 Pages<br>$48\,\overline{)13954}$ Total entries<br>Entries<br>per page |

Summary

Pages required for Dewey Number Index:

| | |
|---|---|
| January | 9 |
| February | 34 |
| March | 59 |
| April | 85 |
| May | 110 |
| June | 136 |
| July | 161 |
| August | 187 |
| September | 212 |
| October | 238 |
| November | 265 |
| December | 291 |

## Summary

Total pages per month:

| | |
|---|---|
| January | 64 |
| February | 143 |
| March | 221 |
| April | 300 |
| May | 378 |
| June | 458 |
| July | 537 |
| August | 615 |
| September | 694 |
| October | 780 |
| November | 867 |
| December | 952 |

## Summary

Total pages per month:

| | |
|---|---|
| January | 159 |
| February | 332 |
| March | 504 |
| April | 677 |
| May | 849 |
| June | 1023 |
| July | 1197 |
| August | 1368 |
| September | 1540 |
| October | 1726 |
| November | 1911 |
| December | 2094 |

As stated when describing calculations of the microfiche version of the Union Catalog, it will be necessary to change the type size and the page format in order to film the catalog with sufficient resolution. This should result in a 17% increase in the page count. Thus, the total page count per month should be:

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 | January | 159 | Pages per month |
| | | x .17 | % of increase |
| | | 27.03 | Increase in pages |
| | | 159 | Pages per month |
| | | + 27 | Increase in pages |
| | | 186 | Total pages |
| | February | 332 | Pages per month |
| | | x .17 | % of increase |
| | | 56.44 | Increase in pages |
| | | 332 | Pages per month |
| | | + 56 | Increase in pages |
| | | 388 | Total pages |
| | March | 504 | Pages per month |
| | | x .17 | % of increase |
| | | 85.68 | Increase in pages |
| | | 504 | Pages per month |
| | | + 86 | Increase in pages |
| | | 590 | Total pages |
| | April | 677 | Pages per month |
| | | x .17 | % of increase |
| | | 115.09 | Increase in pages |
| | | 677 | Pages per month |
| | | + 115 | Increase in pages |
| | | 792 | Total pages |
| | May | 849 | Pages per month |
| | | x .17 | % of increase |
| | | 144.33 | Increase in pages |
| | | 849 | Pages per month |
| | | + 144 | Increase in pages |
| | | 993 | Total pages |

| Fiscal Year | Month | Calculcations |
|---|---|---|
| 1977 | June | 1023 Pages per month |
| | | x .17 % of increase |
| | | 173.91 Increase in pages |
| | | 1023 Pages per month |
| | | + 174 Increase in pages |
| | | 1197 Total pages |
| | July | 1197 Pages per month |
| | | x .17 % of increase |
| | | 203.49 Increase in pages |
| | | 1197 Pages per month |
| | | + 203 Increase in pages |
| | | 1400 Total pages |
| | August | 1368 Pages per month |
| | | x .17 % of increase |
| | | 232.56 Increase in pages |
| | | 1368 Pages per month |
| | | + 233 Increase in pages |
| | | 1601 Total pages |
| | September | 1540 Pages per month |
| | | x .17 % of increase |
| | | 261.8 Increase in pages |
| | | 1540 Pages per month |
| | | + 262 Increase in pages |
| | | 1802 Total pages |
| 1978 | October | 1726 Pages per month |
| | | x .17 % of increase |
| | | 293.42 Increase in pages |
| | | 1726 Pages per month |
| | | + 293 Increase in pages |
| | | 2019 Total pages |
| | November | 1911 Pages per month |
| | | x .17 % of increase |
| | | 324.87 Increase in pages |

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1978 | November | 1911 Pages per month<br>+ 325 Increase in pages<br>2236 Total pages |
|  | December | 2094 Pages per month<br>x .17 % of increase<br>355.98 Increase in pages |
|  | Summary | 2094 Pages per month<br>+ 356 Increase in pages<br>2450 Total pages |

Final total pages per month:

| | |
|---|---|
| January | 186 |
| February | 388 |
| March | 590 |
| April | 792 |
| May | 993 |
| June | 1197 |
| July | 1400 |
| August | 1601 |
| September | 1802 |
| October | 2019 |
| November | 2236 |
| December | 2450 |

According to industry COM standards, there are 325 frames or pages per fiche. Consequently, the monthly fiche requirement would be:

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1977 | January | .57 Fiche per month<br>325/186 Total pages<br>Frames<br>per fiche |
|  | February | 1.19 Fiche per month<br>325/388 Total pages<br>Frames<br>per fiche |

| Fiscal Year | Month | Calculcations |
|---|---|---|
| 1977 | March | 1.81 Fiche per month<br>325/590 Total Pages<br>Frames<br>per fiche |
|  | April | 2.43 Fiche per month<br>325/792 Total pages<br>Frames<br>per fiche |
|  | May | 3.05 Fiche per month<br>325/993 Total pages<br>Frames<br>per fiche |
|  | June | 3.68 Fiche per month<br>325/1197 Total pages<br>Frames<br>per fiche |
|  | July | 4.30 Fiche per month<br>325/1400 Total pages<br>Frames<br>per fiche |
|  | August | 4.92 Fiche per month<br>325/1601 Total pages<br>Frames<br>per fiche |
|  | September | 5.54 Fiche per month<br>325/1802 Total pages<br>Frames<br>per fiche |
| 1978 | October | 6.21 Fiche per month<br>325/2019 Total pages<br>Frames<br>per fiche |
|  | November | 6.88 Fiche per month<br>325/2236 Total pages<br>Frames<br>per fiche |

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1978 | December | 7.53 Fiche per month<br>325/2450 Total pages<br>Frames<br>per fiche |

### Summary

Number of fiche per month:

| | |
|---|---|
| January | 1 |
| February | 2 |
| March | 2 |
| April | 3 |
| May | 4 |
| June | 4 |
| July | 5 |
| August | 5 |
| September | 6 |
| October | 7 |
| November | 7 |
| December | 8 |

Step 2. Having found the number of fiche per month, the cost of each monthly update can be calculated. Costs for both 500 and 1000 copies were calculated.

### 500 Copies

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1977 | January | 1 Total number of fiche<br>x 16 Cost per master<br>$ 16 Cost for masters |
| | | 1 Total number of fiche<br>x.14 Cost per copy<br>$.14 Cost for 1 copy |
| | | .14 Cost for 1 copy<br>x500 Number of copies<br>$ 70 Cost for 500 copies |

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 (cont'd) | | 16 | Cost for masters |
| | | + 70 | Cost for 500 copies |
| | | $ 86 | Total Cost |
| | February | 2 | Total number of fiche |
| | | x 16 | Cost per master |
| | | $ 32 | Cost for masters |
| | | 2 | Total number of fiche |
| | | x.14 | Cost per copy |
| | | $.28 | Cost for 1 copy |
| | | .28 | Cost for 1 copy |
| | | x500 | Number of copies |
| | | $140 | Cost for 500 copies |
| | | 32 | Cost for masters |
| | | +140 | Cost for 500 copies |
| | | $172 | Total cost |
| | March | 2 | Total number of fiche |
| | | x 16 | Cost per master |
| | | $ 32 | Cost for masters |
| | | 2 | Total number of fiche |
| | | x.14 | Cost per copy |
| | | $.28 | Cost for 1 copy |
| | | .28 | Cost for 1 copy |
| | | x500 | Number of copies |
| | | $140 | Cost for 500 copies |
| | | 32 | Cost for masters |
| | | +140 | Cost for 500 copies |
| | | $172 | Total cost |
| | April | 3 | Total number of fiche |
| | | x 16 | Cost per master |
| | | $ 48 | Cost for masters |
| | | 3 | Total number of fiche |
| | | x.14 | Cost per copy |
| | | $.42 | Cost for 1 copy |

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 (cont'd) | | .42 | Cost for 1 copy |
| | | x500 | Number of copies |
| | | $210 | Cost for 500 copies |
| | | | |
| | | 48 | Cost for masters |
| | | +210 | Cost for 500 masters |
| | | $258 | Total Cost |
| | | | |
| | May | 4 | Total number of fiche |
| | | x 16 | Cost per master |
| | | $ 64 | Cost for masters |
| | | | |
| | | 4 | Total number of fiche |
| | | x.14 | Cost per copy |
| | | $.56 | Cost for 1 copy |
| | | | |
| | | .56 | Cost for 1 copy |
| | | x500 | Number of copies |
| | | $280 | Cost for 500 copies |
| | | | |
| | | 64 | Cost for masters |
| | | +280 | Cost for 500 copies |
| | | $344 | Total Cost |
| | | | |
| | June | 4 | Total number of fiche |
| | | x 16 | Cost per master |
| | | $ 64 | Cost for masters |
| | | | |
| | | 4 | Total number of fiche |
| | | x.14 | Cost per copy |
| | | $.56 | Cost for 1 copy |
| | | | |
| | | .56 | Cost for 1 copy |
| | | x500 | Number of copies |
| | | $280 | Cost for 500 copies |
| | | | |
| | | 64 | Cost for masters |
| | | +280 | Cost for 500 copies |
| | | $344 | Total cost |

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1977 (cont'd) | July | 5 Total number of fiche |
| | | x 16 Cost per master |
| | | $ 80 Cost per master |
| | | 5 Total number of fiche |
| | | x.14 Cost per copy |
| | | $.70 Cost for 1 copy |
| | | .70 Cost for 1 copy |
| | | x500 Number of copies |
| | | $350 Cost for 500 copies |
| | | 80 Cost for masters |
| | | +350 Cost for 500 copies |
| | | $430 Total Cost |
| | August | 5 Total number of fiche |
| | | x 16 Cost per master |
| | | $ 80 Cost for masters |
| | | 5 Total number of fiche |
| | | x.14 Cost per copy |
| | | $.70 Cost for 1 copy |
| | | .70 Cost for 1 copy |
| | | x500 Number of copies |
| | | $350 Cost for 500 copies |
| | | 80 Cost for masters |
| | | +350 Cost for 500 copies |
| | | $430 Total Cost |
| | September | 6 Total number of fiche |
| | | x 16 Cost per master |
| | | $ 96 Cost for masters |
| | | 6 Total number of fiche |
| | | x.14 Cost per copy |
| | | $.84 Cost for 1 copy |

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 (cont'd) | | .84 | Cost for 1 copy |
| | | x500 | Number of copies |
| | | $420 | Cost for 500 copies |
| | | 96 | Cost for masters |
| | | +420 | Cost for 500 copies |
| | | $516 | Total Cost |
| 1978 | October | 7 | Total number of fiche |
| | | x 16 | Cost per master |
| | | $112 | Cost for masters |
| | | 7 | Total number of fiche |
| | | x.14 | Cost per copy |
| | | $.98 | Cost for 1 copy |
| | | .98 | Cost for 1 copy |
| | | x500 | Number of copies |
| | | $490 | Cost for 500 copies |
| | | 112 | Cost for masters |
| | | +490 | Cost for 500 copies |
| | | $602 | Total cost |
| | November | 7 | Total number of fiche |
| | | x 16 | Cost per master |
| | | $112 | Cost for masters |
| | | 7 | Total number of fiche |
| | | x.14 | Cost per copy |
| | | $.98 | Cost for 1 copy |
| | | .98 | Cost for 1 copy |
| | | x500 | Number of copies |
| | | $490 | Cost for 500 copies |
| | | 112 | Cost for masters |
| | | +490 | Cost for 500 copies |
| | | $602 | Total Cost |
| | December | 8 | Total number of fiche |
| | | x 16 | Cost per master |
| | | $128 | Cost for masters |

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1978 (cont'd) | | 8 | Total number of fiche |
| | | x.14 | Cost per copy |
| | | $1.12 | Cost for 1 copy |
| | | 1.12 | Cost for 1 copy |
| | | x500 | Number of copies |
| | | $560 | Cost for 500 copies |
| | | 128 | Cost for masters |
| | | +560 | Cost for 500 copies |
| | | $688 | Total Cost |

1000 Copies

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 | January | 1 | Total number of fiche |
| | | x 16 | Cost per master |
| | | $ 16 | Cost for masters |
| | | 1 | Total number of fiche |
| | | x.12 | Cost per copy |
| | | $.12 | Cost for 1 copy |
| | | .12 | Cost for 1 copy |
| | | x1000 | Number of copies |
| | | $ 120 | Cost for 1000 copies |
| | February | 2 | Total number of fiche |
| | | x 16 | Cost per master |
| | | $ 32 | Cost for masters |
| | | 2 | Total number of fiche |
| | | x.12 | Cost per copy |
| | | $.24 | Cost for 1 copy |
| | | .24 | Cost for 1 copy |
| | | x1000 | Number of copies |
| | | $ 240 | Cost for 1000 copies |
| | | 32 | Cost for masters |
| | | +240 | Cost for 1000 copies |
| | | $272 | Total Cost |

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 (cont'd) | March | 2 | Total number of fiche |
| | | x 16 | Cost per master |
| | | $ 32 | Cost for masters |
| | | 2 | Total number of fiche |
| | | x.12 | Cost per copy |
| | | $.24 | Cost for 1 copy |
| | | .24 | Cost for 1 copy |
| | | x1000 | Number of copies |
| | | $ 240 | Cost for 1000 copies |
| | | 32 | Cost for masters |
| | | +240 | Cost for 1000 copies |
| | | $272 | Total cost |
| | April | 3 | Total number of fiche |
| | | x 16 | Cost per master |
| | | $ 48 | Cost for masters |
| | | 3 | Total number of fiche |
| | | x.12 | Cost per copy |
| | | $.36 | Cost for 1 copy |
| | | .36 | Cost for 1 copy |
| | | x1000 | Number of copies |
| | | $ 360 | Cost for 1000 copies |
| | | 48 | Cost for master |
| | | +360 | Cost for 1000 copies |
| | | $408 | Total cost |
| | May | 4 | Total number of fiche |
| | | x 16 | Cost per master |
| | | $ 64 | Cost for masters |
| | | 4 | Total number of fiche |
| | | x.12 | Cost per copy |
| | | $.48 | Cost for 1 copy |
| | | .48 | Cost for 1 copy |
| | | x1000 | Number of copies |
| | | $ 480 | Cost for 1000 copies |

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1977 (cont'd) | | 64 Cost for masters |
| | | +480 Cost for 1000 copies |
| | | $544 Total cost |
| | June | 4 Total number of fiche |
| | | x 16 Cost per master |
| | | $ 64 Cost for masters |
| | | 4 Total number of fiche |
| | | x.12 Cost per copy |
| | | $.48 Cost for 1 copy |
| | | .48 Cost for 1 copy |
| | | x1000 Number of copies |
| | | $ 480 Cost for 1000 copies |
| | | 64 Cost for masters |
| | | +480 Cost for 1000 copies |
| | | $544 Total cost |
| | July | 5 Total number of fiche |
| | | x 16 Cost per master |
| | | $ 80 Costs for masters |
| | | 5 Total number of fiche |
| | | x.12 Cost per copy |
| | | $.60 Cost for 1 copy |
| | | .60 Cost for 1 copy |
| | | x1000 Number of copies |
| | | $ 600 Cost for 1000 copies |
| | | 80 Cost for masters |
| | | +600 Cost for 1000 copies |
| | | $680 Total cost |
| | August | 5 Total number of fiche |
| | | x 16 Cost per master |
| | | $ 80 Cost for masters |
| | | 5 Total number of fiche |
| | | x.12 Cost per copy |
| | | $.60 Cost for 1 copy |

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 (cont'd) | | .60 | Cost for 1 copy |
| | | x1000 | Number of copies |
| | | $ 600 | Cost for 1000 copies |
| | | 80 | Cost for masters |
| | | +600 | Cost for 1000 copies |
| | | $680 | Total cost |
| | September | 6 | Total number of fiche |
| | | x 16 | Cost per master |
| | | $ 96 | Cost for masters |
| | | 6 | Total number of fiche |
| | | x.12 | Cost per copy |
| | | $.72 | Cost for 1 copy |
| | | .72 | Cost for 1 copy |
| | | x1000 | Number of copies |
| | | $ 720 | Cost for 1000 copies |
| | | 96 | Cost for masters |
| | | +720 | Cost for 1000 copies |
| | | $816 | Total cost |
| 1978 | October | 7 | Total number of fiche |
| | | x 16 | Cost per master |
| | | $112 | Cost for masters |
| | | 7 | Total number of fiche |
| | | x.12 | Cost per copy |
| | | $.84 | Cost for 1 copy |
| | | .84 | Cost for 1 copy |
| | | x1000 | Number of copies |
| | | $ 840 | Cost for 1000 copies |
| | | 112 | Cost for masters |
| | | +840 | Cost for 1000 copies |
| | | $952 | Total cost |

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1978 (cont'd) | November | 7 | Total number of fiche |
| | | x 16 | Cost per master |
| | | $112 | Cost for masters |
| | | 7 | Total number of fiche |
| | | x.12 | Cost per copy |
| | | $.84 | Cost for 1 copy |
| | | .84 | Cost for 1 copy |
| | | x1000 | Number of copies |
| | | $ 840 | Cost for 1000 copies |
| | | 112 | Cost for masters |
| | | +840 | Cost for 1000 copies |
| | | $952 | Total cost |
| | December | 8 | Total number of fiche |
| | | x 16 | Cost per master |
| | | $128 | Cost for masters |
| | | 8 | Total number of fiche |
| | | x.12 | Cost per copy |
| | | $.96 | Cost for 1 copy |
| | | .96 | Cost for 1 copy |
| | | x1000 | Number of copies |
| | | $ 960 | Cost for 1000 copies |
| | | 128 | Cost for masters |
| | | +960 | Cost for 1000 copies |
| | | $1088 | Total cost |

## Summary

Cost of monthly updates of the Union Catalog:

| | | |
|---|---|---|
| January 1977 | 500 copies | $ 86 |
| | 1000 copies | $ 136 |
| February | 500 copies | $ 172 |
| | 1000 copies | $ 272 |
| March | 500 copies | $ 172 |
| | 1000 copies | $ 272 |
| April | 500 copies | $ 258 |
| | 1000 copies | $ 408 |
| May | 500 copies | $ 344 |
| | 1000 copies | $ 544 |
| June | 500 copies | $ 344 |
| | 1000 copies | $ 544 |
| July | 500 copies | $ 430 |
| | 1000 copies | $ 680 |
| August | 500 copies | $ 430 |
| | 1000 copies | $ 680 |
| September | 500 copies | $ 516 |
| | 1000 copies | $ 816 |
| October | 500 copies | $ 602 |
| | 1000 copies | $ 952 |
| November | 500 copies | $ 602 |
| | 1000 copies | $ 952 |
| December | 500 copies | $ 688 |
| | 1000 copies | $1,088 |

## LIBRARY UNION MONTHLY PRODUCTION (LUMP)

In addition to providing a print and microfiche version of the Union Catalog along with its monthly updates, a microfiche version of the in-process file should be provided. A description of its contents is given on page IV-51 of Chapter 4. To insure the timeliness of the information generated it should be issued monthly on COM. Calculations were started with July 1976 since the anticipated date of completion of the in-process subsystem is that month and year. In order to calculate its size and the cost of production, the following steps were completed. See chart on Schedule - LUMP, Microfiche (D-107 through D-110).

Step 1. In order to ascertain the size of the file, actual and projected copyright clearance figures were obtained from the Selections Section of DBPH. It was estimated that DBPH would attempt to clear 300 more copyrights per year than the actual expected production in order to allow for possible rejections and/or delays.

| Fiscal Year | Projected DBPH Production | Projected Copyright Requests |
|---|---|---|
| 1976 | 2500 | 2800 |
| 1977 | 2700 | 3000 |
| 1978 | 3240 | 3540 |

In addition, starting in the first year of production network copyright requests should also be included in the list. An estimate of 1500 non-DBPH copyright requests has been used to project the size of LUMP. The Selections Section of DBPH indicated that they cleared 1326 copyrights between April 1974 and March 1975. In order to allow for some growth and to cover the 1% of the titles for which clearance is requested but not granted, the figure was increased to 1500. Using these base figures, the following calculations were performed:

July 1976 to December 1976
Fiscal Years 1976, 1977

2800 Projected DBPH Copyright Requests
x.25% of Fiscal Year Requests Included

700 DBPH Clearances Requested - Fiscal 1976

## SCHEDULE - LUMP

## MICROFICHE

| Month | Last Entry Date | Issue Date | Charged To | Number of Entries and Fiche | Cost |
|---|---|---|---|---|---|
| LUMP - July 1976 | Last working day of the month | Third week of the month | Fiscal Year 1976 | 358 Titles on 1 Fiche | $81.84 |
| LUMP - August 1976 | Same as above | Same as above | Fiscal Year 1976 | 716 Titles on 1 Fiche | $81.84 |
| LUMP - September 1976 | Same as above | Same as above | Fiscal Year 1976 | 1074 Titles on 1 Fiche | $81.84 |
| | | | | Grand Total Fiscal Year 1976 | $245.52 |

## SCHEDULE - LUMP

## MICROFICHE (cont'd)

| Month | Last Entry Date | Issue Date | Charged To | Number of Entries and Fiche | Cost |
|---|---|---|---|---|---|
| LUMP - October 1976 | Same as above | Same as above | Fiscal Year 1977 | 1449 Titles on 1 Fiche | $81.84 |
| LUMP - November 1976 | Same as above | Same as above | Fiscal Year 1977 | 1824 Titles on 1 Fiche | $81.84 |
| LUMP - December 1976 | Last working day of the month | Third week of the month | Fiscal Year 1977 | 2199 Titles on 1 Fiche | $81.84 |
| LUMP - January 1977 | Same as above | Same as above | Fiscal Year 1977 | 2574 Titles on 1 Fiche | $81.84 |
| LUMP - February 1977 | Same as above | Same as above | Fiscal Year 1977 | 2949 Titles on 2 Fiche | $163.68 |
| LUMP - March 1977 | Same as above | Same as above | Fiscal Year 1977 | 3324 Titles on 2 Fiche | $163.68 |

## SCHEDULE - LUMP

## MICROFICHE (cont'd)

| Month | Last Entry Date | Issue Date | Charged To | Number of Entries and Fiche | Cost |
|---|---|---|---|---|---|
| LUMP - April 1977 | Same as above | Same as above | Fiscal Year 1977 | 3699 Titles on 2 Fiche | $163.68 |
| LUMP - May 1977 | Same as above | Same as above | Fiscal Year 1977 | 4074 Titles on 2 Fiche | $163.68 |
| LUMP - June 1977 | Last working day of the month | Third week of the month | Fiscal Year 1977 | 4449 Titles on 2 Fiche | $163.68 |
| LUMP - July 1977 | Same as above | Same as above | Fiscal Year 1977 | 4824 Titles on 2 Fiche | $163.68 |
| LUMP - August 1977 | Same as above | Same as above | Fiscal Year 1977 | 5199 Titles on 2 Fiche | $163.68 |
| LUMP - September 1977 | Same as above | Same as above | Fiscal Year 1977 | 5574 Titles on 3 Fiche | $245.52 |
|  |  |  |  | Grand Total for Fiscal Year 1977 | $1718.64 |

## SCHEDULE - LUMP

## MICROFICHE (cont'd)

| Month | Last Entry Date | Issue Date | Charged To | Number of Entries and Fiche | Cost |
|---|---|---|---|---|---|
| LUMP - October 1977 | Same as above | Same as above | Fiscal Year 1978 | 5994 Titles on 3 Fiche | $245.52 |
| LUMP - November 1977 | Same as above | Same as above | Fiscal Year 1978 | 6414 Titles on 3 Fiche | $245.52 |
| LUMP - December 1977 | Same as above | Same as above | Fiscal Year 1978 | 6834 Titles on 3 Fiche | $245.52 |
|  |  |  |  | Partial Total Fiscal Year 1978 | $736.56 |

3000 Projected DBPH Copyright Requests
x.25 %of Fiscal Year Requests Included

750 DBPH Clearances Requested – Fiscal 1977

1500 Projected non-DBPH Copyright Requests
x.50 %of Fiscal Year Requests Included

750 Non-DBPH Clearances Requested - Fiscal Year 1976
and 1977

233.3333 DBPH Copyright Requests per month
3 |700 DBPH Clearances Requested – Fiscal 1976
Number of
months in DBPH Fiscal 1976
Included in 1st LUMP

250 DBPH Copyright Requests per month
3 |750 DBPH Clearances Requested – Fiscal 1977
Number of
months in DBPH Fiscal 1977
Included in 1st LUMP

125 Non-DBPH Copyright Requests per month
3 |750 Non-DBPH Clearances Requested – Fiscal 1976 and 1977
Number of
months in non-DBPH Year
Included in 1st LUMP

Fiscal 1976 Extended

July 1976

233 DBPH Requests
+125 Non-DBPH Requests
358 Requests per month

August 1976

358 Requests per month
233 DBPH Requests
+125 Non-DBPH Requests
716 Requests per month

September 1976

716 Requests per month
233 DBPH Requests
+125 Non-DBPH Requests
1074 Requests per month

October 1976

1074 Requests per month
250 DBPH Requests
+125 Non-DBPH Requests
1449 Requests per month

November 1976

1449 Requests per month
250 DBPH Requests
+125 Non-DBPH Requests
1824 Requests per month

December 1976

1824 Requests per month
250 DBPH Requests
+125 Non-DBPH Requests
2199 Requests per month

January 1977 to December 1977
Fiscal Years 1977, 1978

| | |
|---|---|
| 3000 | Projected DBPH Copyright Requests |
| x.75 | % of Fiscal Year Requests Included |
| 2250 | DBPH Clearance Requested – Fiscal 1977 |

| | |
|---|---|
| 3540 | Projected DBPH Copyright Requests |
| x.25 | % of Fiscal Year Requests Included |
| 885 | DBPH Clearances Requested – Fiscal 1978 |

250 DBPH Copyright Requests per month
9 /2250 Clearances Requested – Fiscal 1977
Number of
months in DBPH Fiscal 1977
Included in 2nd LUMP

295 DBPH Copyright Requests per month
3 /885 DBPH Clearances Requested – Fiscal 1978
Number of
months in DBPH Fiscal 1978
Included in 2nd LUMP

125 Copyright Requests per month
12 /1500 Clearances Requested – Fiscal 1977 and 1978
Number of
months in non-DBPH year
Included in 2nd LUMP

Fiscal 1977

| January 1977 | | February 1977 | | March 1977 | |
|---|---|---|---|---|---|
| 2199 | Titles from 1976 | 2574 | Requests per month | 2049 | Requests per month |
| 250 | DBPH Requests | 250 | DBPH Requests | 250 | DBPH Requests |
| +125 | Non-DBPH Requests | +125 | Non-DBPH Requests | +125 | Non-DBPH Requests |
| 2574 | Requests per month | 2949 | Requests per month | 3324 | Requests per month |

## Fiscal 1977

### April 1977

| | |
|---|---|
| 3324 | Requests per month |
| 250 | DBPH Requests |
| +125 | Non-DBPH Requests |
| 3699 | Requests per month |

### May 1977

| | |
|---|---|
| 3699 | Requests per month |
| 250 | DBPH Requests |
| +125 | Non-DBPH Requests |
| 4074 | Requests per month |

### June 1977

| | |
|---|---|
| 4074 | Requests per month |
| 250 | DBPH Requests |
| +125 | Non-DBPH Requests |
| 4449 | Requests per month |

## Fiscal 1977

### July 1977

| | |
|---|---|
| 4449 | Requests per month |
| 250 | DBPH Requests |
| +125 | Non-DBPH Requests |
| 4824 | Requests per month |

### August 1977

| | |
|---|---|
| 4824 | Requests per month |
| 250 | DBPH Requests |
| +125 | Non-DBPH Requests |
| 5199 | Requests per month |

### September 1977

| | |
|---|---|
| 5199 | Requests per month |
| 250 | DBPH Requests |
| +125 | Non-DBPH Requests |
| 5574 | Requests per month |

## Fiscal 1978

### October 1977

| | |
|---|---|
| 5574 | Requests per month |
| 295 | DBPH Requests |
| +125 | Non-DBPH Requests |
| 5994 | Requests per month |

### November 1977

| | |
|---|---|
| 5994 | Requests per month |
| 295 | DBPH Requests |
| +125 | Non-DBPH Requests |
| 6414 | Requests per month |

### December 1977

| | |
|---|---|
| 6414 | Requests per month |
| 295 | DBPH Requests |
| +125 | Non-DBPH Requests |
| 6834 | Requests per month |

## SUMMARY

Estimated size of the LUMP file:

| Calendar Year | Month | Projected Copyright Requests |
|---|---|---|
| 1976 | July | 358 titles |
| | August | 716 titles |
| | September | 1074 titles |
| | October | 1449 titles |
| | November | 1824 titles |
| | December | 2199 titles |

| | Month | Projected Copyright Requests |
|---|---|---|
| Calendar year 1977 | January | 2574 titles |
| | February | 2949 titles |
| | March | 3324 titles |
| | April | 3699 titles |
| | May | 4074 titles |
| | June | 4449 titles |
| | July | 4824 titles |
| | August | 5199 titles |
| | September | 5574 titles |
| | October | 5994 titles |
| | November | 6414 titles |
| | December | 6834 titles |

Step 2. The second prerequisite to deriving the cost of producing LUMP was determining the number of lines each entry would take. The entry will consist of 7 elements: author, title, publisher, copyright date, status code(s), date(s) of status, and DBPH control number. A variable length field with a maximum character count or, where possible, a fixed length field was set for each element with the total adding up to a 132 character line. The length per field is as follows:

| Field | Length | | Blank Spaces |
|---|---|---|---|
| Author | 24 | | 5 |
| Title | 34 | | 5 |
| Publisher | 16 | | 5 |
| Copyright Date | 4 | | 5 |
| Status Code | 10 | | 5 |
| Date of Status | 5 | | 5 |
| DBPH Control Number | 9 | | |
| Total | 102 | + | 30 |
| Grand Total | | 132 | |

Since it is possible that a title could be in more than 1 status at a time, 3 lines were allowed per item. Most entries should require only one line, some may require two, and a few could require three; however, by figuring three lines per title the majority of cases should be covered.

Finally, since an entry should be listed by both author and title, it was necessary to double the number of lines required for the monthly LUMP. Although there may be some items with no author, only .023% of the entries will have this characteristic based on the survey of 400 titles completed prior to calculating the Union Catalog. This figure will not be significant until the eighth month of production, but it has been calculated for each month anyway.

Given the information above, the following calculations provide the total lines for LUMP each month:

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1976 Extended | July | 358 | Entries |
| | | x.023 | % of title only entries |
| | | 8.234 | Number of title only entries |
| | | 358 | Entries |
| | | - 8 | Number of title only entries |
| | | 350 | Number of author entries |
| | | 350 | Number of author entries |
| | | x 3 | Number of lines per entry |
| | | 1050 | Number of lines for authors |
| | | 358 | Number of title entries |
| | | x 3 | Number of lines per entry |
| | | 1074 | Number of lines for title |
| | | 1050 | Number of lines for authors |
| | | +1074 | Number of lines for titles |
| | | 2124 | Total Number of lines |
| | August | 716 | Entries |
| | | x.023 | % of title only entries |
| | | 16.468 | Number of title only entries |
| | | 716 | Entries |
| | | - 16 | % of title only entries |
| | | 700 | Number of author entries |
| | | 700 | Number of author entries |
| | | x 3 | Number of lines per entry |
| | | 2100 | Number of author entries |

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1976 (cont'd) | | 716 | Number of title entries |
| | | x 3 | Number of lines per entry |
| | | 2148 | Number of lines for titles |
| | | 2100 | Number of lines for authors |
| | | +2148 | Number of lines for titles |
| | | 4248 | Total number of lines |
| | September | 1074 | Entries |
| | | x.023 | % of title only entries |
| | | 24.702 | Number of title only entries |
| | | 1074 | Entries |
| | | - 25 | Number of title only entries |
| | | 1049 | Number of author entries |
| | | 1049 | Number of author entries |
| | | x 3 | Number of lines per entry |
| | | 3147 | Number of lines for authors |
| | | 1074 | Number of title entries |
| | | x 3 | Number of lines per entry |
| | | 3222 | Number of lines for titles |
| | | 3147 | Number of lines for authors |
| | | +3222 | Number of lines for titles |
| | | 6369 | Total number of lines |
| 1977 | October | 1449 | Entries |
| | | x.023 | % of title only entries |
| | | 33.327 | Number of title only entries |
| | | 1449 | Entries |
| | | - 33 | Number of title only entries |
| | | 1416 | Number of author entries |
| | | 1416 | Number of author entries |
| | | x 3 | Number of lines per entry |
| | | 4248 | Number of lines for authors |

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 (cont'd) | | 1449 | Number of title entries |
| | | x 3 | Number of lines per entry |
| | | 4347 | Number of lines for titles |
| | | 4248 | Number of lines for authors |
| | | +4347 | Number of lines for titles |
| | | 8595 | Total number of lines |
| | November | 1824 | Entries |
| | | x.023 | % of title only entries |
| | | 41.952 | Number of title only entries |
| | | 1824 | Entries |
| | | - 42 | Number of title only entries |
| | | 1782 | Number of author entries |
| | | 1782 | Number of author entries |
| | | x 3 | Number of lines per entry |
| | | 5346 | Number of lines for authors |
| | | 1824 | Number of title entries |
| | | x 3 | Number of lines per entry |
| | | 5472 | Number of lines for titles |
| | | 5346 | Number of lines for authors |
| | | +5472 | Number of lines for titles |
| | | 10818 | Total number of lines |
| | December | 2199 | Entries |
| | | x.023 | % of title only entries |
| | | 50.577 | Number of title only entries |
| | | 2199 | Entries |
| | | - 51 | Number of title only entries |
| | | 2148 | Number of author entries |
| | | 2148 | Number of author entries |
| | | x 3 | Number of lines per entry |
| | | 6444 | Number of lines for authors |

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 (cont'd) | | 2199 | Number of title entries |
| | | x 3 | Number of lines per entry |
| | | 6597 | Number of lines for titles |
| | | 6444 | Number of lines for authors |
| | | +6597 | Number of lines for titles |
| | | 13194 | Total number of lines |
| | January | 2574 | Entries |
| | | x.023 | % of title only entries |
| | | 59.202 | Number of title only entries |
| | | 2574 | Entries |
| | | - 59 | Number of title only entries |
| | | 2515 | Number of author entries |
| | | 2515 | Number of author entries |
| | | x 3 | Number of lines per entry |
| | | 7545 | Number of lines for authors |
| | | 2575 | Number of title entries |
| | | x 3 | Number of lines per entry |
| | | 7722 | Number of lines for titles |
| | | 7545 | Number of lines for authors |
| | | +7722 | Number of lines for titles |
| | | 15267 | Total number of lines |
| | February | 2949 | Entries |
| | | x.023 | % of title only entries |
| | | 67.827 | Number of title only entries |
| | | 2949 | Entries |
| | | - 68 | Number of title only entries |
| | | 2881 | Number of author entries |
| | | 2881 | Number of author entries |
| | | x 3 | Number of lines per entry |
| | | 8643 | Number of lines for authors |

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 (cont'd) | | 2949 | Number of title entries |
| | | x 3 | Number of lines per entry |
| | | 8847 | Number of lines for titles |
| | | 8643 | Number of lines for authors |
| | | +8847 | Number of lines for titles |
| | | 17490 | Total number of lines |
| | March | 3324 | Entries |
| | | x.023 | % of title only entries |
| | | 76.452 | Number of title only entries |
| | | 3324 | Entries |
| | | - 76 | Number of title only entries |
| | | 3248 | Number of author entries |
| | | 3248 | Number of author entries |
| | | x 3 | Number of lines per entry |
| | | 9744 | Number of lines for authors |
| | | 3324 | Number of title entries |
| | | x 3 | Number of lines per entry |
| | | 9972 | Number of lines for titles |
| | | 9744 | Number of lines for authors |
| | | +9972 | Number of lines for titles |
| | | 19716 | Total number of lines |
| | April | 3699 | Entries |
| | | x.023 | % of title only entries |
| | | 85.077 | Number of title only entries |
| | | 3699 | Entries |
| | | - 85 | Number of title only entries |
| | | 3614 | Number of author entries |
| | | 3614 | Number of author entries |
| | | x 3 | Number of lines per entry |
| | | 10842 | Number of lines for authors |

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 (cont'd) | | 3699 | Number of title entries |
| | | x 3 | Number of lines per entry |
| | | 11097 | Number of lines for titles |
| | | 10842 | Number of lines for authors |
| | | +11097 | Number of lines for titles |
| | | 21939 | Total number of lines |
| | May | 4074 | Entries |
| | | x.023 | % of title only entries |
| | | 93.702 | Number of title only entries |
| | | 4074 | Entries |
| | | - 94 | Number of title only entries |
| | | 3980 | Number of author entries |
| | | 3980 | Number of author entries |
| | | x 3 | Number of lines per entry |
| | | 11940 | Number of lines for authors |
| | | 4074 | Number of title entries |
| | | x 3 | Number of lines per entry |
| | | 12222 | Number of lines for titles |
| | | 11940 | Number of lines for authors |
| | | +12222 | Number of lines for titles |
| | | 24162 | Total number of lines |
| | June | 4449 | Entries |
| | | x.023 | % of title only entries |
| | | 102.327 | Number of title only entries |
| | | 4449 | Entries |
| | | -102 | Number of title only entries |
| | | 4347 | Number of author entries |
| | | 4347 | Number of author entries |
| | | x 3 | Number of lines per entry |
| | | 13041 | Number of lines for authors |
| | | 4449 | Number of title entries |
| | | x 3 | Number of lines per entry |
| | | 13347 | |

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 (cont'd) | | 13041 | Number of lines for authors |
| | | +13347 | Number of lines for titles |
| | | 26388 | Total number of lines |
| | July | 4824 | Entries |
| | | .023 | % of title only entries |
| | | 110.952 | Number of title only entries |
| | | 4824 | Entries |
| | | - 111 | Number of title only entries |
| | | 4713 | Number of author entries |
| | | 4713 | Number of author entries |
| | | x 3 | Number of lines per entry |
| | | 14139 | Number of lines for authors |
| | | 4824 | Number of title entries |
| | | x 3 | Number of lines per entry |
| | | 14472 | Number of lines for titles |
| | | 14139 | Number of lines for authors |
| | | +14472 | Number of lines for title |
| | | 28611 | Total number of lines |
| | August | 5199 | Entries |
| | | x .023 | % of title only entries |
| | | 119.577 | Number of title only entries |
| | | 5199 | Entries |
| | | - 120 | Number of title only entries |
| | | 5079 | Number of author entries |
| | | 5079 | Number of author entries |
| | | x 3 | Number of lines per entry |
| | | 15237 | Number of lines for author |
| | | 5199 | Number of title entries |
| | | x 3 | Number of lines per entry |
| | | 15597 | Number of lines for titles |

| Fiscal Year | Month | | Calculations |
|---|---|---|---|
| 1977 (cont'd) | | 15237 | Number of lines for author |
| | | +15597 | Number of lines for titles |
| | | 30834 | Total number of lines |
| | September | 5574 | Entries |
| | | x .023 | % of title only entries |
| | | 128.202 | Number of title only entries |
| | | 5574 | Entries |
| | | - 128 | Number of title only entries |
| | | 5446 | Number of author entries |
| | | 5446 | Number of author entries |
| | | x 3 | Number of lines per entry |
| | | 16338 | Number of lines per author |
| | | 5574 | Number of title entries |
| | | x 3 | Number of lines per entry |
| | | 16722 | Number of lines for titles |
| | | 16338 | Number of lines for authors |
| | | +16722 | Number of lines for titles |
| | | 33060 | Total number of lines |
| 1978 | October | 5994 | Entries |
| | | x .023 | % of title only entries |
| | | 137.862 | Number of title only entries |
| | | 5994 | Entries |
| | | - 138 | Number of title only entries |
| | | 5856 | Number of authors entries |
| | | 5994 | Number of titles entries |
| | | x 3 | Number of lines per entry |
| | | 17982 | Number of lines for titles |
| | | 17568 | Number of lines for authors |
| | | +17982 | Number of lines for titles |
| | | 35550 | Total number of lines |

| Fiscal Year | Month | Calculation | |
|---|---|---|---|
| 1978 (cont'd) | November | 6414 | Entries |
| | | x .023 | % of title only entries |
| | | 147.522 | Number of title only entries |
| | | 6414 | Entries |
| | | - 148 | Number of title only entries |
| | | 6266 | Number of author entries |
| | | 6266 | Number of author entries |
| | | x 3 | Number of lines per entry |
| | | 18798 | Number of lines for authors |
| | | 6414 | Number of title entries |
| | | x 3 | Number of lines per entry |
| | | 19242 | Number of lines for titles |
| | | 18798 | Number of lines for authors |
| | | +19242 | Number of lines for titles |
| | | 38040 | Total number of lines |
| | December | 6834 | Entries |
| | | x .023 | % of title only entries |
| | | 157.182 | Number of title only entries |
| | | 6834 | Entries |
| | | - 157 | Number of title only entries |
| | | 6677 | Number of author entries |
| | | 6677 | Number of author entries |
| | | x 3 | Number of lines per entry |
| | | 20031 | Number of lines for authors |
| | | 6834 | Number of title entries |
| | | x 3 | Number of lines per entry |
| | | 20502 | Number of lines for titles |
| | | 20031 | Number of lines for authors |
| | | +20502 | Number of lines for titles |
| | | 40533 | Total number of lines |

# SUMMARY

The number of lines in each month of LUMP are as follows:

| Calendar Year | Month | No. of Lines |
|---|---|---|
| 1978 | July | 2,124 |
| | August | 4,248 |
| | September | 6,369 |
| | October | 8,595 |
| | November | 10,818 |
| | December | 13,194 |
| 1977 | January | 15,267 |
| | February | 17,490 |
| | March | 19,716 |
| | April | 21,939 |
| | May | 24,162 |
| | June | 26,388 |
| | July | 28,661 |
| | August | 30,834 |
| | September | 33,060 |
| | October | 35,550 |
| | November | 38,040 |
| | December | 40,533 |

Step 3. Given the number of lines, the number of fiche for LUMP can be determined. There are a total of 80 useable lines per computer page (frame). In the case of LUMP, 5 of those lines will be used for header and page number, column headings and blank lines, thus, leaving only 75 lines for entries. Based on this information the following calculations were computed:

| Fiscal Year | Month | Calculation |
|---|---|---|
| 1976 extended | July | 28.32 Number of frames<br>75 \|2124 Total lines<br>lines<br>per frame |
| | August | 56.64 Number of frames<br>75 \|4248 Total lines<br>lines<br>per lines |

| Fiscal Year | Month | Calculation |
|---|---|---|
| 1976 (cont'd) | September | 84.92 Number of frames<br>75⟌6369 Total lines<br>lines<br>per frame |
| 1977 | October | 114.6 Number of frames<br>75⟌8595 Total lines<br>lines<br>per frame |
| | November | 144.24 Number of frames<br>75⟌10818 Total lines<br>lines<br>per frame |
| | December | 175.92 Number of frames<br>75⟌13194 Total lines<br>lines<br>per frame |
| | January | 203.56 Number of frames<br>75⟌15267 Total lines<br>lines<br>per frame |
| | February | 233.2 Number of frames<br>75⟌17490 Total lines<br>lines<br>per frame |
| | March | 262.88 Number of frames<br>75⟌19716 Total lines<br>lines<br>per frame |
| | April | 292.52 Number of frames<br>75⟌21939 Total lines<br>lines<br>per frame |

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1977 (cont'd) | May | 322.16 Number of frames<br>75 \| 24162 Total lines<br>lines<br>per frame |
| | June | 351.84 Number of frames<br>75 \| 26388 Total lines<br>lines<br>per frame |
| | July | 381.48 Number of frames<br>75 \| 28611 Total lines<br>lines<br>per frame |
| | August | 411.12 Number of frames<br>75 \| 30834 Total lines<br>lines<br>per frame |
| | September | 440.8 Number of frames<br>75 \| 33060 Total lines<br>lines<br>per frame |
| 1978 | October | 474 Number of frames<br>75 \| 35550 Total lines<br>lines<br>per frame |
| | November | 507.2 Number of frames<br>75 \| 38040 Total lines<br>lines<br>per frame |
| | December | 540.44 Number of frames<br>75 \| 40533 Total lines<br>lines<br>per frame |

## SUMMARY

| Calendar Year | Month | No. of Frames |
|---|---|---|
| 1976 | July | 29 |
| | August | 57 |
| | September | 85 |
| | October | 115 |
| | November | 145 |
| | December | 176 |
| 1977 | January | 204 |
| | February | 234 |
| | March | 263 |
| | April | 293 |
| | May | 323 |
| | June | 352 |
| | July | 382 |
| | August | 412 |
| | September | 441 |
| | October | 474 |
| | November | 508 |
| | December | 541 |

The industry COM standard for 42X reduction ratio is 208 frames per fiche. Thus, the following calculations show the number of fiche for each edition of LUMP.

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1976 extended | July | 0.13 Fiche<br>$208\,\overline{)29}$ Frames of LUMP<br>frames<br>per fiche |
| | August | .27 Fiche<br>$208\,\overline{)57}$ Frames of LUMP<br>frames<br>per fiche |
| | September | .40 Fiche<br>$208\,\overline{)85}$ Frames of LUMP<br>frames<br>per fiche |

| Fiscal Year | Month | Calculations |
|---|---|---|
| 1977 | October | .55 Fiche<br>$208\overline{)115}$ Frames of LUMP<br>frames<br>per fiche |
| | November | .69 Fiche<br>$208\overline{)145}$ Frames of LUMP<br>frames<br>per fiche |
| | December | .84 Fiche<br>$208\overline{)176}$ Frames of LUMP<br>frames<br>per fiche |
| | January | .98 Fiche<br>$208\overline{)204}$ Frames for LUMP<br>frames<br>per fiche |
| | February | 1.12 Fiche<br>$208\overline{)234}$ Frames for LUMP<br>frames<br>per fiche |
| | March | 1.26 Fiche<br>$208\overline{)263}$ Frames for LUMP<br>frames<br>per fiche |
| | April | 1.40<br>$208\overline{)293}$ Frames for LUMP<br>frames<br>per fiche |
| | May | 1.55 Fiche<br>$208\overline{)323}$ Frames for LUMP<br>frames<br>per fiche |

| Fiscal Year | Month | |
|---|---|---|
| 1977 (cont'd) | June | 1.69 Fiche<br>$208\overline{)352}$ Frames for LUMP<br>frames<br>per fiche |
| | July | 1.83 Fiche<br>$208\overline{)352}$ Frames for LUMP<br>frames<br>per fiche |
| | August | 1.98 Fiche<br>$208\overline{)412}$ Frames for LUMP<br>frames<br>per fiche |
| | September | 2.12 Fiche<br>$208\overline{)441}$ Frames for LUMP<br>frames<br>per fiche |
| 1978 | October | 2.27 Fiche<br>$208\overline{)474}$ Frames for LUMP<br>frames<br>per fiche |
| | November | 2.44 Fiche<br>$208\overline{)508}$ Frames for LUMP<br>frames<br>per fiche |
| | December | 2.6 Fiche<br>$208\overline{)541}$ Frames for LUMP<br>frames<br>per fiche |

# SUMMARY

| Calendar Year | Month | No. of Fiche |
|---|---|---|
| 1976 | July | 1 |
| | August | 1 |
| | September | 1 |
| | October | 1 |
| | November | 1 |
| | December | 1 |
| 1977 | January | 1 |
| | February | 2 |
| | March | 2 |
| | April | 2 |
| | May | 2 |
| | June | 2 |
| | July | 2 |
| | August | 2 |
| | September | 3 |
| | October | 3 |
| | November | 3 |
| | December | 3 |

Step 4. Having derived the number of fiche needed each month for LUMP, the cost per month can be calculated based on figures supplied by Basil Doudnikoff, President of Dataflow Corporation. Production of the fiche master should cost .03¢ per frame.

| | |
|---|---|
| .0004 | Cost per line |
| x 80 | Number of lines per page |
| $.032 | Cost per frame |

Therefore, one master fiche would cost $6.24.

| | |
|---|---|
| 208 | Number of frames per fiche |
| x .03 | Cost per frame |
| $6.24 | Cost per fiche |

In addition, it will cost $.30 per fiche to produce a working master and $.15 per fiche to produce a copy of the masters.

Assuming the following distribution of 500 copies, the cost of LUMP can be calculated.

| | | |
|---|---|---|
| DBPH | | 40 |
| Office of the Chief | 2 | |
| Project Coordination Office | 4 | |
| Office Services | 1 | |
| Publications Services | 1 | |
| Building Services | 0 | |
| Materials Development Office | 2 | |
| Collection Development Office | 6 | |
| Processing Section | 6 | |
| Production Section | 4 | |
| Technical Section | 1 | |
| Network Development Office | 2 | |
| Reference | 2 | |
| Music | 1 | |
| Volunteer Utilization Section | 1 | |
| Volunteer Training Section | 0 | |
| Network Services Section | 1 | |
| Resources Coordination Unit | 5 | |
| Circulation and Collection Maintenance Unit | 1 | |
| Multi-state Centers (5 each) | | 10 |
| Regional Libraries (4 X 54) | | 216 |
| Subregional Libraries (2 X 102) | | 204 |
| Reserve | | 30 |
| | Total | 500 |

Both the format and the issue date of LUMP could change, depending on the input from these users.

Thus, the monthly cost for LUMP would be as follows:

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1976 | July | $6.24 | Cost per master fiche |
| | | × 1 | Number of masters |
| | | $6.24 | Cost for master fiche |
| | | $ .30 | Cost per working master |
| | | × 2 | Number of working masters |
| | | $ .60 | Cost for working master |
| | | $ .15 | Cost per fiche copy |
| | | × 1 | Number of fiche copies |
| | | $ .15 | Cost per copy |
| | | $ .15 | Cost per copy |
| | | ×500 | Number of sets |
| | | $ 75 | Cost for 500 sets |
| | | $6.24 | Cost for master fiche |
| | | $ .60 | Cost for working masters |
| | | + 75.00 | Cost for 500 sets |
| | | $81.84 | Total cost for fiche |
| | August | $6.24 | Cost per master fiche |
| | | × 1 | Number of masters |
| | | $6.24 | Cost for master fiche |
| | | $ .30 | Cost per working master |
| | | × 2 | Number of working masters |
| | | $ .60 | Cost for working masters |
| | | $ .15 | Cost per fiche copy |
| | | × 1 | Number of fiche |
| | | $ .15 | Cost for copies |

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1976 (cont'd) | | $ .15 | Cost per copy |
| | | x500 | Number of sets |
| | | $75 | Cost for 500 sets |
| | | | |
| | | $6.24 | Cost for master fiche |
| | | .60 | Cost for working masters |
| | | + 75.00 | Cost for 500 sets |
| | | $81.84 | Total cost per fiche |
| | | | |
| | September | $6.24 | Cost per master fiche |
| | | x 1 | Number of masters |
| | | $6.24 | Cost for master fiche |
| | | | |
| | | $ .30 | Cost per working master |
| | | x 2 | Number of fiche |
| | | $ .60 | Cost for working masters |
| | | | |
| | | $ .15 | Cost per fiche copy |
| | | x 1 | Number of fiche |
| | | $ .15 | Cost for copies |
| | | | |
| | | $ .15 | Cost for copies |
| | | x 500 | Number of sets |
| | | $ 75 | Cost for 500 sets |
| | | | |
| | | $6.24 | Cost for master fiche |
| | | .60 | Cost for working master |
| | | + 75.00 | Cost for 500 sets |
| | | $81.84 | Total cost for fiche |
| | | | |
| 1977 | October | $6.24 | Cost per master fiche |
| | | x 1 | Number of masters |
| | | $6.24 | Cost for master fiche |
| | | | |
| | | $ .30 | Cost per working master |
| | | x 2 | Number of working masters |
| | | $ .60 | Cost for working masters |

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 (cont'd) | | $ .15 | Cost for copies |
| | | x 1 | Number of fiche |
| | | $ .15 | Cost for copies |
| | | $ .15 | Cost for copies |
| | | x 500 | Number of sets |
| | | $ 75 | Cost for 500 sets |
| | | $6.24 | Cost for master fiche |
| | | .60 | Cost for working masters |
| | | + 75.00 | Cost for 500 sets |
| | | $81.84 | Total cost for fiche |
| | November | $6.24 | Cost for master fiche |
| | | x 1 | Number of masters |
| | | $6.24 | Cost for master fiche |
| | | $ .30 | Cost per working master |
| | | x 2 | Number of masters |
| | | $ .60 | Cost for working masters |
| | | $ .15 | Cost per fiche copy |
| | | x 1 | Number of fiche |
| | | $ .15 | Cost for copies |
| | | $ .15 | Cost for copies |
| | | x 500 | Number of sets |
| | | $ 75 | Cost for 500 sets |
| | | $6.24 | Cost for master fiche |
| | | .60 | Cost for working masters |
| | | + 75.00 | Cost for 500 sets |
| | | $81.84 | Total cost for fiche |
| | December | $6.24 | Cost per master fiche |
| | | x 1 | Number of masters |
| | | $6.24 | Cost for master fiche |
| | | $ .30 | Cost per working master |
| | | x 2 | Number of working masters |
| | | $ .60 | Cost for working masters |

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 (cont'd) | | $ .15 | Cost per fiche copy |
| | | x 1 | Number of fiche |
| | | $ .15 | Cost for copies |
| | | $ .15 | Cost for copies |
| | | x 500 | Number of sets |
| | | $ 75 | Cost for 500 copies |
| | | $6.24 | Cost for master fiche |
| | | .60 | Cost for working masters |
| | | + 75.00 | Cost for 500 sets |
| | | $81.84 | Total cost for fiche |
| | January | $6.24 | Cost per master fiche |
| | | x 1 | Number of masters |
| | | $6.24 | Cost for master fiche |
| | | $ .30 | Cost per working master |
| | | x 2 | Number of working masters |
| | | $ .60 | Cost for working masters |
| | | $ .15 | Cost per fiche copy |
| | | x 1 | Number of fiche |
| | | $ .15 | Cost for copies |
| | | $ .15 | Cost for copies |
| | | x 500 | Number of sets |
| | | $ 75 | Cost for 500 copies |
| | | $6.24 | Cost for master fiche |
| | | .60 | Cost for working masters |
| | | + 75.00 | Cost for 500 sets |
| | | $81.84 | Total cost for fiche |
| | February | $6.24 | Cost per master fiche |
| | | x 2 | Number of masters |
| | | $12.48 | Cost for master fiche |

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 (cont'd) | | $ .30 | Cost per working master |
| | | x 2 | Number of fiche |
| | | $ .60 | Cost for copy of 1 set |
| | | $ .60 | Cost for copy of 1 set |
| | | x 2 | Number of working master sets |
| | | $1.20 | Cost for working masters |
| | | $ .15 | Cost per fiche copy |
| | | x 2 | Number of fiche |
| | | $ .30 | Cost for copies |
| | | $ .30 | Cost for copies |
| | | x 500 | Number of sets |
| | | $ 150 | Cost for 500 sets |
| | | $12.48 | Cost for master fiche |
| | | 1.20 | Cost for working masters |
| | | + 150.00 | Cost for 500 sets |
| | | $163.68 | Total cost for fiche |
| | March | $6.24 | Cost per master fiche |
| | | x 2 | Number of masters |
| | | $12.48 | Cost for master fiche |
| | | $ .30 | Cost per working master |
| | | x 2 | Number of fiche |
| | | $ .60 | Cost for copy of 1 set |
| | | $ .60 | Cost for copy of 1 set |
| | | x 2 | Number of working master sets |
| | | $1.20 | Cost for working masters |
| | | $ .15 | Cost per fiche copy |
| | | x 2 | Number of fiche |
| | | $ .30 | Cost for copies |

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 (cont'd) | | $ .30 | Cost for copies |
| | | x 500 | Number of sets |
| | | $150.00 | Cost for 500 copies |
| | | $12.48 | Cost for master fiche |
| | | 1.20 | Cost for working masters |
| | | + 150.00 | Cost for 500 sets |
| | | $163.68 | Total cost for fiche |
| | April | $6.24 | Cost per master fiche |
| | | x 2 | Number of masters |
| | | $12.48 | Cost for master fiche |
| | | $ .30 | Cost per working master |
| | | x 2 | Number of fiche |
| | | $ .60 | Cost for copy of 1 set |
| | | $ .60 | Cost for copy of 1 set |
| | | x 2 | Number of working master sets |
| | | $1.20 | Cost for working masters |
| | | $ .15 | Cost per fiche copy |
| | | x 2 | Number of fiche |
| | | $ .30 | Cost for copies |
| | | $ .30 | Cost for copies |
| | | x 500 | Number of sets |
| | | $150.00 | Cost for 500 sets |
| | | $12.48 | Cost for master fiche |
| | | 1.20 | Cost for working masters |
| | | + 150.00 | Cost for 500 sets |
| | | $163.68 | Total cost for fiche |
| | May | $6.24 | Cost per master fiche |
| | | x 2 | Number of masters |
| | | $12.48 | Cost for master fiche |

| Fiscal Year | Month | Calculations | |
|---|---|---|---|
| 1977 (cont'd) | | $ .30 | Cost per working master |
| | | x 2 | Number of fiche |
| | | $ .60 | Cost for copy of 1 set |
| | | $ .60 | Cost for copy of 1 set |
| | | x 2 | Number of working master sets |
| | | $1.20 | Cost for working masters |
| | | $ .15 | Cost per fiche copy |
| | | x 2 | Number of fiche |
| | | $ .30 | Cost for copies |
| | | $ .30 | Cost for copies |
| | | x 500 | Number of sets |
| | | $150.00 | Cost for 500 sets |
| | | $12.48 | Cost for master fiche |
| | | 1.20 | Cost for working masters |
| | | + 150.00 | Cost for 500 sets |
| | | $163.68 | Total cost for fiche |
| | June | $6.24 | Cost per master fiche |
| | | x 2 | Number of masters |
| | | $12.48 | Cost for master fiche |
| | | $ .30 | Cost per working masters |
| | | x 2 | Number of fiche |
| | | $ .60 | Cost for copy of 1 set |
| | | $ .60 | Cost for copy of 1 set |
| | | x 2 | Number of working master sets |
| | | $1.20 | Cost for working masters |
| | | $ .15 | Cost per fiche copy |
| | | x 2 | Number of fiche |
| | | $ .30 | Cost for copies |

| Fiscal Year | Month | | Calculations |
|---|---|---|---|
| 1977 (cont'd) | | $ .30 | Cost for copies |
| | | x 500 | Number of sets |
| | | $150.00 | Cost for 500 sets |
| | | $12.48 | Cost for master fiche |
| | | 1.20 | Cost for working masters |
| | | + 150.00 | Cost for 500 sets |
| | | $163.68 | Total cost for fiche |
| | July | $6.24 | Cost per master fiche |
| | | x 2 | Number of masters |
| | | $12.48 | Cost for master fiche |
| | | $ .30 | Cost per working masters |
| | | x 2 | Number of fiche |
| | | $ .60 | Cost for copy of 1 set |
| | | $ .60 | Cost for copy of 1 set |
| | | x 2 | Number of working master sets |
| | | $1.20 | Cost for working masters |
| | | $ .15 | Cost per fiche copy |
| | | x 2 | Number of fiche |
| | | $ .30 | Cost for copies |
| | | $ .30 | Cost for copies |
| | | x 500 | Number of sets |
| | | $150.00 | Cost for 500 sets |
| | | $12.48 | Cost for master fiche |
| | | 1.20 | Cost for working master |
| | | + 150.00 | Cost for 500 sets |
| | | $163.68 | Total cost for fiche |
| | August | $6.24 | Cost per master fiche |
| | | x 2 | Number of masters |
| | | $12.48 | Cost for master fiche |

| Fiscal Year | Month | | Calculations |
|---|---|---|---|
| 1977 (cont'd) | | $ .30 | Cost per working master |
| | | x 2 | Number of fiche |
| | | $ .60 | Cost for copy of 1 set |
| | | $ .60 | Cost for copy of 1 set |
| | | x 2 | Number of working master sets |
| | | $1.20 | Cost for working masters |
| | | $ .15 | Cost per fiche copy |
| | | x 2 | Number of fiche |
| | | $ .30 | Cost for copies |
| | | $ .30 | Cost for copies |
| | | x 500 | Number of sets |
| | | $150.00 | Cost for 500 sets |
| | | $12.48 | Cost for master fiche |
| | | 1.20 | Cost for working masters |
| | | + 150.00 | Cost for 500 sets |
| | | $163.68 | Total cost for fiche |
| | September | $6.24 | Cost per master fiche |
| | | x 3 | Number of masters |
| | | $18.72 | Cost for master fiche |
| | | $ .30 | Cost per working master |
| | | x 3 | Number of fiche |
| | | $ .90 | Cost for copy of 1 set |
| | | $ .90 | Cost for copy of 1 set |
| | | x 2 | Number of working master sets |
| | | $1.80 | Cost for working masters |
| | | $ .15 | Cost per fiche copy |
| | | x 3 | Number of fiche |
| | | $ .45 | Cost for copies |

| Fiscal Year | Month | | Calculations |
|---|---|---|---|
| 1977 (cont'd) | | $ .45 | Cost for copies |
| | | x 500 | Number of sets |
| | | $225.00 | Cost for 500 sets |
| | | $18.72 | Cost for master fiche |
| | | 1.80 | Cost for working masters |
| | | + 225.00 | Cost for 500 sets |
| | | $245.52 | Total cost for fiche |
| 1978 | October | $6.24 | Cost per master fiche |
| | | x 3 | Number of masters |
| | | $18.72 | Cost for master fiche |
| | | $ .30 | Cost per working master |
| | | x 3 | Number of fiche |
| | | $ .90 | Cost for copy of 1 set |
| | | $ .90 | Cost for copy of 1 set |
| | | x 2 | Number of working master sets |
| | | $1.80 | Cost for working masters |
| | | $ .15 | Cost per fiche copy |
| | | x 3 | Number of fiche |
| | | $ .45 | Cost for copies |
| | | $ .45 | Cost for copies |
| | | x 500 | Number of sets |
| | | $225.00 | Cost for 500 sets |
| | | $18.72 | Cost for master fiche |
| | | 1.80 | Cost for working masters |
| | | + 225.00 | Cost for 500 sets |
| | | $245.52 | Total cost for fiche |

| Fiscal Year | Month | | Calculations |
|---|---|---|---|
| 1978 | November | $6.24 | Cost per master fiche |
| | | x 3 | Number of masters |
| | | $18.72 | Cost for master fiche |
| | | $ .30 | Cost per working master |
| | | x 3 | Number of fiche |
| | | $ .90 | Cost for copy of 1 set |
| | | $ .90 | Cost for copy of 1 set |
| | | x 2 | Number of working master sets |
| | | $1.80 | Cost for working masters |
| | | $ .15 | Cost per fiche copy |
| | | x 3 | Number of fiche |
| | | $ .45 | Cost for copies |
| | | $ .45 | Cost for copies |
| | | x 500 | Number of sets |
| | | $225.00 | Cost for 500 sets |
| | | $18.72 | Cost for master fiche |
| | | 1.80 | Cost for working masters |
| | | + 225.00 | Cost for 500 sets |
| | | $245.52 | Total cost for fiche |
| | December | $6.24 | Cost per master fiche |
| | | x 3 | Number of masters |
| | | $18.72 | Cost for master fiche |
| | | $ .30 | Cost per working master |
| | | x 3 | Number of fiche |
| | | $ .90 | Cost for copy of 1 set |
| | | $ .90 | Cost for copy of 1 set |
| | | x 2 | Number of master sets |
| | | $1.80 | Cost for working masters |

| Fiscal Year | Month | | Calculations |
|---|---|---|---|
| 1978 (cont'd) | | $ .15 | Cost per fiche copy |
| | | x 3 | Number of fiche |
| | | $ .45 | Cost for copies |
| | | | |
| | | $ .45 | Cost for copies |
| | | x 500 | Number of sets |
| | | $225.00 | Cost for 500 sets |
| | | | |
| | | $18.72 | Cost for master fiche |
| | | 1.80 | Cost for working masters |
| | | + 225.00 | Cost for 500 sets |
| | | $245.52 | Total cost of fiche |

## SUMMARY

The cost of LUMP per month is:

| Calendar Year | Month | Cost per Month |
|---|---|---|
| 1976 | July | $ 81.84 |
| | August | 81.84 |
| | September | 81.84 |
| | October | 81.84 |
| | November | 81.84 |
| | December | 81.84 |
| | Total | $491.04 |
| 1977 | January | $ 81.84 |
| | February | 163.68 |
| | March | 163.68 |
| | April | 163.68 |
| | May | 163.68 |
| | June | 163.68 |
| | July | 163.68 |
| | August | 163.68 |
| | September | 245.52 |
| | October | 245.52 |
| | November | 245.52 |
| | December | 245.52 |
| | Total | $2209.68 |

# SUMMARY SCHEDULES

## ALL PRODUCTS

## SUMMARY

## FISCAL YEAR 1976

| Title | First Date Issued | Frequency of Issue | Charged To | Cost |
|---|---|---|---|---|
| Working Document (Print) | December 31, 1976 | Not applicable | Fiscal Year 1976 | $ 26,250.00 |
| First Union Catalog (Print) | July 1, 1976 | Annually | Fiscal Year 1976 | $ 80,000.00 |
| First Union Catalog (Microfiche) | May 1, 1976 | Annually | Fiscal Year 1976 | $ 2,170.00 |
| LUMP - July through September 1976 (Microfiche) | August 1976 | Monthly | Fiscal Year 1976 | $. 245.52 |
| | | | Grand Total Fiscal Year 1976 | $108,665.52 |

## SUMMARY

## FISCAL YEAR 1977

| Title | First Date Issued | Frequency of Issue | Charged To | Cost |
|---|---|---|---|---|
| Second Union Catalog (Print) | July 1, 1977 | Annually | Fiscal Year 1977 | $192,000.00 |
| Second Union Catalog (Microfiche) | May 1, 1977 | Annually | Fiscal Year 1977 | $ 6,536.00 |
| Union Catalog Monthly Update - January through September 1977 (Microfiche) | February 1977 | Monthly | Fiscal Year 1977 | $ 2,752.00 |
| LUMP - January through September 1977 (Microfiche) | August 1976 | Monthly | Fiscal Year 1977 | $ 1,718.64 |
| | | | Grand Total Fiscal Year 1977 | $203,006.64 |

## SUMMARY

## FISCAL YEAR 1978

| Title | First Date Issued | Frequency of Issue | Charged To | Cost |
|---|---|---|---|---|
| Third Union Catalog (Print) | July 1, 1978 | Annually | Fiscal Year 1978 | $256,000.00 |
| Third Union Catalog (Microfiche) | May 1, 1978 | Annually | Fiscal Year 1978 | $ 8,600.00 |
| Union Catalog Monthly Updates - October through December 1977 (Microfiche) | February 1977 | Monthly | Fiscal Year 1978 | $ 1,892.00 |
| LUMP - October through December 1977 (Microfiche) | August 1976 | Monthly | Fiscal Year 1978<br>Partial Total Fiscal Year 1978 | $ 736.56<br>$267,228.56 |

# APPENDIX E

## DATA ELEMENTS

The charts in this Appendix cover eight basic functions completed in the process of preparing a book for use by the blind and handicapped. These functions are:

1. Order Print Copy
2. Book Selection for Reproduction
3. Copyright Clearance Request
4. Bibliographic Data Development
5. Quota Determination (Network)
6. Book Production
7. Completed Book Shipment
8. Holdings Information

For each of the eight functions the following items are specified:

a. Data Element — a discrete item of information (of which 106 have been identified)
b. Utility — the use(s) to which a data element can be put
c. Source — the point(s) of origin of each data element
d. Product(s) Where Found — the output(s) in which the data element will appear

In addition, five "standing lists" consisting of items of information that will remain relatively unchanged and will be used over and over again, are as follows:

1. Network Libraries
2. Volunteer Groups
3. Vendors, Jobbers, Producing Agencies
4. Publishers
5. Authority Files

For each of the five standing lists, the following items are specified:

a. Data Element — a discrete item of information (of which 36 have been identified)
b. Source — the point(s) of origin of each data element

Each data element appears in the list at its earliest point of origin and, with two exceptions, is not repeated.

## FUNCTION: ORDER PRINT COPY

| No. | Data Element | Utility | Source | Product(s) Where Found |
|---|---|---|---|---|
| 1 | Title | Book identification; statistics | Collection Development Processing | Purchase Order (print copy) Notice<br>Vendor Claim or Cancellation Notice<br>Vendor Performance Report--Statistical Summary<br>Copyright Request<br>Copyright Request Notice<br>Copyright Request Follow-Up Notice<br>Copyright Request Report Listing<br>Copyright Request Outstanding Listing<br>Request for Price Quotation<br>Production Authorization Notice<br>Production Estimate Follow-Up Notice<br>Titles in Process--Statistical Summary<br>Production Status Report--Statistical Summary<br>Production Status Report Listing<br>Quota Cards Notice<br>Production Completion Report Listing<br>Production Completion Report Listing<br>Distribution Schedule Listing<br>Quota Determination Listing<br>Quota Determination--Statistical Summary<br>Produced Book Expenditure--Statistical Summary<br>Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update<br>Library Union Monthly Production (LUMP)<br>Bibliographies (Recurrent and on demand)<br>Talking Book Topics<br>Braille Book Review<br>Truncated Dewey Index Listing<br>Union Catalog Addition--Statistical Summary |

FUNCTION: ORDER PRINT COPY (cont'd)

| No. | Data Element | Utility | Source | Product(s) Where Found |
|---|---|---|---|---|
| 1 | Title | Book identification; statistics | Collection Development Processing | Union Catalog Profile--Statistical Summary |
| 2 | Author | Book identification | Collection Development Processing | Purchase Order (print copy) Notice<br>Vendor Claim or Cancellation Notice<br>Copyright Request<br>Copyright Request Notice<br>Copyright Request Follow-Up Notice<br>Copyright Request Report Listing<br>Copyright Request Outstanding Listing<br>Request for Price Quotation<br>Production Authorization Notice<br>Production Estimate Follow-Up Notice<br>Production Status Report Listing<br>Quota Cards Notice<br>Production Completion Report Listing<br>Production Completion Report Listing<br>Quota Determination Listing<br>Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update<br>Library Union Monthly Production (LUMP)<br>Bibliographies (Recurrent and on demand)<br>Talking Book Topics<br>Braille Book Review<br>Truncated Dewey Index Listing |

FUNCTION: ORDER PRINT COPY

| No. | Data Element | Utility | Source | Product(s) Where Found |
|---|---|---|---|---|
| 3 | Publisher of Book | Book identification | Collection Development | Purchase Order (print copy) Notice<br>Vendor Claim or Cancellation Notice<br>Copyright Request<br>Copyright Request Notice<br>Copyright Request Follow-Up Notice<br>Copyright Request Report Listing<br>Copyright Request Outstanding Listing<br>Request for Price Quotation<br>Production Estimate Follow-Up Notice<br>Quota Cards Notice<br>Quota Determination Listing<br>Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update<br>Library Union Monthly Production (LUMP) |
| 4 | Date of Publication | Book identification | Collection Development | Purchase Order (print copy) Notice<br>Vendor Claim or Cancellation Notice<br>Copyright Request<br>Copyright Request Notice<br>Copyright Request Follow-Up Notice<br>Copyright Request Report Listing<br>Copyright Request Outstanding Listing<br>Request for Price Quotation<br>Production Estimate Follow-Up Notice<br>Quota Cards Notice<br>Quota Determination Listing<br>Catalog Cards<br>DBPH Union Catalog |

## FUNCTION: ORDER PRINT COPY (cont'd)

| No. | Data Element | Utility | Source | Product(s) Where Found |
|---|---|---|---|---|
| 4 | Date of Publication | Book identification | Collection Development | Union Catalog Monthly Update<br>Library Union Monthly Production (LUMP)<br>Bibliographies (Recurrent and on demand)<br>Talking Book, Topics<br>Braille Book Review |
| 5 | DBPH control number | Unique, linking number | Processing | Vendor Claim or Cancellation Notice<br>Copyright Request<br>Copyright Request Follow-Up Notice<br>Request for Price Quotation<br>Production Status Report Listing<br>Quota Cards Notice<br>Production Completion Report Listing<br>Distribution Schedule Listing<br>Quota Determination Listing<br>Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update<br>Library Union Monthly Production (LUMP) |
| 6 | Quantity of print copies ordered/per title | Accounting reports | Collection Development | Purchase Order (print copy) Notice<br>Vendor Claim or Cancellation Notice |
| 7 | Price per copy | Accounting reports | Collection Development | Purchase Order (print copy) Notice |

FUNCTION: ORDER PRINT COPY (cont'd)

| No. | Data Element | Utility | Source | Product(s) Where Found |
|---|---|---|---|---|
| 8 | P.O. number (print book) | LC accounting requirement | Office Services | Purchase Order (print copy) Notice |
| 9<br>10<br>11 | Vendor name<br>address<br>item number | Location of print book | Collection Development<br>Vendor list file<br>Collection Development | Purchase Order (print copy) Notice<br>Vendor Claim or Cancellation Notice |
| 12<br>13 | Status code: print book ordered<br>date | Monitoring | Processing System | Titles in Process-Statistical Summary<br>Library Union Monthly Production (LUMP)<br>Vendor Claim or Cancellation Notice<br>Library Union Monthly Production (LUMP) |
| 14 | 30-60-90 day flag | Follow-up notification | System | Vendor Performance Report--Statistical Summary |
| 15<br>16 | Disposition status code: print copies received or print book order cancelled<br>date | Reports | Processing System | Vendor Performance Report--Statistical Summary<br>Quota Determination--Statistical Summary<br>Library Union Monthly Production (LUMP) |

## FUNCTION: ORDER PRINT COPY (cont'd)

| No. | Data Element | Utility | Source | Product(s) Where Found |
|---|---|---|---|---|
| 17 | Payment information | LC accounting requirement | Office Services | |
| 18 | Total number of titles to be ordered; inclusive dates | For comparison purposes | Collection Development | |
| 19 | Total number of titles ordered to date | Reports; monitoring | System | |

## FUNCTION: BOOK SELECTION FOR REPRODUCTION

| No. | Data Element | Utility | Source | Product(s) Where Found |
|---|---|---|---|---|
| 20 | Medium code | Identification of medium of reproduction | Collection Development | Copyright Request Notice<br>Request for Price Quotation<br>Production Authorization Notice<br>Production Estimate Follow-Up Notice<br>Production Status Report--Statistical Summary<br>Production Status Report Listing<br>Quota Cards Notice<br>Production Completion Report Listing<br>Production Completion Report Listing<br>Quota Determination Listing<br>Quota Determination Statistical Summary<br>Library Union Monthly Production (LUMP)<br>Union Catalog Additions--Statistical Summary |
| 21 | Quota code(s) | Specific allocation of title by category of book/ popularity | Collection Development | Production Status Report--Statistical Summary<br>Production Budget--Statistical Summary<br>Produced Book Expenditures--Statistical Summary |
| 22 | Studio code | Reports, allocation of production work | Collection Development<br>Vendor List file | Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update |
| 23 | Limited production code | Monitoring | Collection Development | |

FUNCTION: BOOK SELECTION FOR REPRODUCTION (cont'd)

| No. | Data Element | Utility | Source | Product(s) Where Found |
|---|---|---|---|---|
| 24 | Producing Agency name code | Reports, allocation of Production work | Collection Development | Request for Price Quotation<br>Production Authorization Notice<br>Production Estimate Follow-Up Notice<br>Production Status Report—Statistical Summary<br>Production Status Report Listing<br>Production Completion Report Listing<br>Production Completion Report Listing<br>Mailing Labels Notice<br>Production Budget--Statistical Summary<br>Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update<br>Union Catalog Additions--Statistical Summary |
| 25 | Same-as-studio code | | Collection Development | |
| 26 | Distribution code | Dissemination of titles among libraries | Collection Development | |
| 27 | General classification | Divides collection along broad interest lines | Collection Development | Request for Price Quotation<br>Bibliographies (Recurrent and on demand)<br>Talking Book Topics<br>Braille Book Review |
| 28 | Special instruction(s) | Assure proper reproduction of unusual book features | Collection Development | Request for Price Quotation<br>Production Status Report Listing |

## FUNCTION: BOOK SELECTION FOR REPRODUCTION (cont'd)

| No. | Data Element | Utility | Source | Product(s) Where Found |
|---|---|---|---|---|
| 29 | Status code:<br>book selected | Reports | | |
| 30 | book rejected<br>rejection (reasons) code | | Collection Development | Titles in Process--Statistical Summary<br>Library Union Monthly Production (LUMP)<br>Library Union Monthly Production (LUMP) |
| 31 | date | History; future requests<br>Monitoring | Collection Development System | |
| 32 | Total allocation by category | Overall quota pattern for comparison purposes, Monitoring | Collection Development System | Produced Book Expenditures--Statistical Summary |
| 33 | Total allocated to date | Reports, monitoring | System | Produced Book Expenditures--Statistical Summary |

## FUNCTION: COPYRIGHT CLEARANCE REQUEST

| No. | Data Element | Utility | Source | Product(s) Where Found |
|---|---|---|---|---|
| 34 | Copyright holder | Legal reproduction permission | Collection Development | Copyright Request |
| 35 | same-as-publisher code | Flag publisher list | Collection Development | |
| 36 | address | Location | Collection Development | Copyright Request Follow-Up Notice |
| 37 | Copyright date | Identification | Collection Development | Copyright Request<br>Copyright Request Follow-Up Notice<br>Copyright Request Report Listing |
| 38 | Requestor code | Provide reply | Library list file | Copyright Request<br>Copyright Request Notice |
| 39 | Status code: copyright clearance requested | Reports | Collection Development | Titles in Process--Statistical Summary<br>Library Union Monthly Production (LUMP)<br>Copyright Request Follow-Up Notice<br>Copyright Request Outstanding Listing |
| 40 | date | Monitoring | System | |
| 41 | 30-60-90 day flag | System mechanism | System | |

## FUNCTION: COPYRIGHT CLEARANCE REQUEST (cont'd)

| No. | Data Element | Utility | Source | Product(s) Where Found |
|---|---|---|---|---|
| 42 | Follow-up letter number | Monitoring | Collection Development | Copyright Request Follow-Up Notice<br>Titles in Process--Statistical Summary |
| 43 | Disposition status code: permission granted or permission denied | Reports | Collection Development | Copyright Request Notice<br>Copyright Request Report Listing<br>Titles in Process--Statistical Summary<br>Production Status Report Listing<br>Library Union Monthly Production (LUMP) |
| 44 | reason code | History; future requests | Collection Development | |
| 45 | date | Monitoring | System | |
| 46 | Restriction code(s) | Distribution instructions | Collection Development | Copyright Request Notice |
| 47 | Status code: requestor notice | Follow-up | Collection Development<br>Library List | Titles in Process--Statistical Summary<br>Library Union Monthly Production (LUMP) |
| 48 | date | Monitoring | System | |

## FUNCTION: BIBLIOGRAPHIC DATA DEVELOPMENT

| No. | Data Element | Utility | Source | Product(s) Where Found |
|---|---|---|---|---|
| 49 | Annotation | Describe overall book content | Collection Development | Production Authorization Notice<br>Quota Cards Notice<br>Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update<br>Library Union Monthly Production (LUMP)<br>Bibliographies (Recurrent and on demand)<br>Talking Book Topics<br>Braille Book Review |
| 50 | Author dates | Differentiate among similarly named authors | Processing<br>Authority files | Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update<br>Library Union Monthly Production (LUMP)<br>Bibliographies (Recurrent and on demand) |
| 51 | Full title | Book identification | Processing | Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update<br>Library Union Monthly Production (LUMP)<br>Bibliographies (Recurrent and on demand) |
| 52 | Edition statement | Book identification | Processing | Purchase Order (print copy) Notice<br>Copyright Request<br>Copyright Request Report Listing<br>Copyright Request Outstanding Listing<br>Production Estimate Follow-Up Notice |

## FUNCTION: BIBLIOGRAPHIC DATA DEVELOPMENT (cont'd)

| No. | Data Element | Utility | Source | Product(s) Where Found |
|---|---|---|---|---|
| 52 | Edition statement | Book identification | Processing | Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update<br>Library Union Monthly Production (LUMP)<br>Bibliographies (Recurrent and on demand) |
| 53 | Reissue statement | Re-production history | Collection Development<br>Processing | Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update<br>Library Union Monthly Production (LUMP)<br>Bibliographies (Recurrent and on demand)<br>Talking Book Topics<br>Braille Book Review |
| 54 | Additional descriptive statement(s) | Retrieval, Book-cards | Collection Development<br>Processing | Production Authorization Notice<br>Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update<br>Library Union Monthly Production (LUMP)<br>Bibliographies (Recurrent and on demand)<br>Talking Book Topics<br>Braille Book Review |
| 55 | Contents note | Describe actual book content | Processing | Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update<br>Library Union Monthly Production (LUMP)<br>Bibliographies (Recurrent and on demand) |

## FUNCTION: BIBLIOGRAPHIC DATA DEVELOPMENT (cont'd)

| No. | Data Element | Utility | Source | Product(s) Where Found |
|---|---|---|---|---|
| 56 | Added entries | Retrieval | Processing<br>Authority file | Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update<br>Library Union Monthly Production (LUMP)<br>Bibliographies (Recurrent and on demand) |
| 57 | Subject headings | Retrieval | Processing | Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update<br>Library Union Monthly Production (LUMP)<br>Bibliographies (Recurrent and on demand) |
| 58 | DBPH book number | Shelf location; medium indication | Processing | Production Authorization Notice<br>Production Completion Report Listing<br>Production Completion Report Listing<br>Distribution Schedule Listing<br>Mailing Labels Notice<br>Quota Determination Listing<br>Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update<br>Library Union Monthly Production (LUMP)<br>Bibliographies (Recurrent and on demand)<br>Talking Book Topics<br>Braille Book Review<br>Truncated Dewey Index Listing |

## FUNCTION: BIBLIOGRAPHIC DATA DEVELOPMENT (cont'd)

| No. | Data Element | Utility | Source | Product(s) Where Found |
|---|---|---|---|---|
| 59 | Full Dewey number | Narrow classification | Processing | Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update<br>Library Union Monthly Production (LUMP)<br>Bibliographies (Recurrent and on demand) |
| 60 | Truncated Dewey number | Broad classification | Processing | Production Authorization Notice<br>Produced Book Expenditures--Statistical Summary<br>Truncated Dewey Index Listing<br>Union Catalog Additions--Statistical Summary<br>Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update<br>Library Union Monthly Production (LUMP)<br>Bibliographies (Recurrent and on demand) |
| 61 | LC class number | Very narrow classification | Processing | Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update<br>Library Union Monthly Production (LUMP)<br>Bibliographies (Recurrent and on demand) |
| 62 | LC card number | Link to MARC records | Collection Development | |

FUNCTION: BIBLIOGRAPHIC DATA DEVELOPMENT (cont'd)

| No. | Data Element | Utility | Source | Product(s) Where Found |
|---|---|---|---|---|
| 63 | Collation | Physical description of book | Processing | Production Authorization Notice<br>Production Budget--Statistical Summary<br>Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update<br>Library Union Monthly Production (LUMP)<br>Bibliographies (Recurrent and on demand)<br>Talking Book Topics<br>Braille Book Review |
| 64 | Narrator name | Retrieval | Processing | Production Authorization Notice<br>Production Budget--Statistical Summary<br>Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update<br>Library Union Monthly Production (LUMP)<br>Bibliographies (Recurrent and on demand)<br>Talking Book Topics |
| 65 | Studio code | Identify narrator's affiliation | Vendor or volunteer list file | Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update<br>Library Union Monthly Production (LUMP)<br>Bibliographies (Recurrent and on demand)<br>Talking Book Topics<br>Braille Book Review |

## FUNCTION: BIBLIOGRAPHIC DATA DEVELOPMENT (cont'd)

| No. | Data Element | Utility | Source | Product(s) Where Found |
|---|---|---|---|---|
| 66 | Series note | Identification, grouping | Processing | Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update<br>Library Union Monthly Production (LUMP)<br>Bibliographies (Recurrent and on demand) |
| 67 | Notes | Additional pertinent bibliographic information | Processing | Catalog Cards<br>DBPH Union Catalog<br>Union Catalog Monthly Update<br>Library Union Monthly Production (LUMP)<br>Bibliographies (Recurrent and on demand) |

## FUNCTION: QUOTA DETERMINATION (NETWORK)

| No. | Data Element | Utility | Source | Product(s) Where Found |
|---|---|---|---|---|
| 68 | Review source | Weighted recommendation | Collection Development | Quota Cards Notice<br>Quota Determination Listing |
| 69 | Library name | Location | Library list | Quota Cards Notice<br>Quota Determination Listing |
| 70 | Number of copies assigned | Comparison purposes | Library list | Quota Cards Notice<br>Quota Determination Listing |
| 71 | Status code: cards sent | Reports | Processing System | Titles in Process--Statistical Summary<br>Library Union Monthly Production (LUMP) |
| 72 | date | Monitoring | | |
| 73 | Number of copies requested | Capture results, revise quota | Field libraries | Quota Determination Listing<br>Quota Determination--Statistical Summary |

FUNCTION: BOOK PRODUCTION

| No. | Data Element | Utility | Source | Product(s) Where Found |
|---|---|---|---|---|
| 74 | General instructions | Assure that DBFH specifications are met | Processing | Request for Price Quotation |
| 75 | Volunteer studio or group name | Producer identification | Production Volunteer list | Titles in Process--Status<br>Library Union Monthly Production (LUMP) |
| 76 | Status code: request for price quotation sent | Reports | Processing | Titles in Process--Statistical Summary |
| 77 | date | Monitoring | System | Library Union Monthly Production (LUMP) |
| 78 | Total cost | Reports | Processing | Production Authorization Notice<br>Production Starus Report Listing<br>Production Budget--Statistical Summary<br>Production Book Expenditures--Statistical Summary |
| 79 | Total number of copies | Reports | Processing | Production Authorization Notice<br>Production Budget--Statistical Summary |
| 80 | Purchase order number (reproduction) | LC accounting requirement | Processing | Production Authorization Notice |

FUNCTION: BOOK PRODUCTION (cont'd)

| No. | Data Element | Utility | Source | Product(s) Where Found |
|---|---|---|---|---|
| 81 | Status code: production cancelled code or production authorization sent | Reports | Processing | Production Authorization Notice<br>Production Estimate Follow-Up Notice<br>Titles in Process--Statistical Summary<br>Production Status Report--Statistical Summary<br>Quota Determination--Statistical Summary<br>Production Budget--Statistical Summary |
| 82 | date | Monitoring | System | Library Union Monthly Production (LUMP) |
| 83 | Date of production start | Monitoring | Processing | Production Status Report Listing |
| 84 | 30-60-90-120 day flag | System mechanism | System | Production Status Report Listing |
| 85 | Follow-Up number | Monitoring | Processing | Production Estimate Follow-Up Notice<br>Titles in Process--Statistical Summary |
| 86 | Date of production completion | Monitoring | Processing | Production Status Report Listing |
| 87 | Payment information | LC accounting requirement | Office Services | |
| 88 | Estimated completion date | Monitoring | Producer | Production Status Report Listing |

## FUNCTION: COMPLETED BOOK SHIPMENT

| No. | Data Element | Utility | Source | Product(s) Where Found |
|---|---|---|---|---|
| 89 | Status code:<br>all copies shipped | Reports | Processing | Titles in Process--Statistical Summary<br>Production Status Report--Statistical Summary<br>Production Status Report Listing<br>Production Completion Report Listing |
| 90 | some copies shipped | Reports | Processing | Production Completion Report Listing |
| 91 | date | Monitoring | System | Library Union Monthly Production (LUMP) |
| 92 | Total number of copies | Reports | Processing | Production Completion Report Listing |
| 93 | Status code:<br>all copies received | Cue to shift title to Union Catalog; assure receipt | Processing | Titles in Process--Statistical Summary |
| 94 | date | Monitoring | System | |
| 95 | Number of copies to be shipped | | Processing | Distribution Schedule Listing |
| 96 | Copy number on mailing label | | System | Mailing Label Notice |

## FUNCTION: HOLDINGS INFORMATION

| No. | Data Element | Utility | Source | Product(s) Where Found |
|---|---|---|---|---|
| 97 | Network holding code(s) | Locations, nationwide | Library list Processing System | DBPH Union Catalog<br>Union Catalog Monthly Update |
| 98 | date | | | |
| 99 | Material location code(s) | Specific location(s) | Library list | DBPH Union Catalog<br>Union Catalog Monthly Update |
| 100 | Local book number | Identification | Field library Processing | DBPH Union Catalog<br>Union Catalog Monthly Update |
| 101 | Local collation | Physical description | Field library Processing | DBPH Union Catalog<br>Union Catalog Monthly Update |
| 102 | Producing agency or library (if different from material location code) | Actual producer: recognition | Library list Processing | DBPH Union Catalog<br>Union Catalog Monthly |
| 103 | Quality code(s) | Comparative value of produce | Field library | DBPH Union Catalog<br>Union Catalog Monthly Update |

## FUNCTION: HOLDINGS INFORMATION - cont'd

| No. | Data Element | Utility | Source | Product(s) Where Found |
|---|---|---|---|---|
| 104 | Lending conditions code | Obtaining a copy of the book | Library list<br>Processing | DBPH Union Catalog<br>Union Catalog Monthly Update |
| 105 | Status code: information added or information deleted | Reports<br>Monitoring | Processing System | Union Catalog Additions--Statistical Summary |
| 106 | date | | | |

STANDING LIST: NETWORK LIBRARIES

| No. | Data Element | Source |
|---|---|---|
| 1 | Library name (including DBPH) | Reference |
| 2 | address | Reference |
| 3 | code | Processing |
| 4 | Distribution (number of copies) code(s) | Collection Development |
| 5 | Union catalog product distribution code | Processing |
| 6 | Cataloging arrangement code | Processing |
| 7 | Lending conditions code | Field libraries |

STANDING LIST: VOLUNTEER GROUPS

| No. | Data Element | Source |
|---|---|---|
| 8 | Group or studio name | Production |
| 9 | address | Production |
| 10 | staff size | Production |
| 11 | specialty codes | Production, Volunteer Utilization |
| 12 | equipment | Production, Volunteer Utilization |
| 13 | contact person name | Production, Volunteer Utilization |
| 14 | address | Production, Volunteer Utilization |
| 15 | phone | Production, Volunteer Utilization |
| 16 | Volunteer name | Production |
| 17 | Language skills code | Production, Processing |
| 18 | Certification level code | Production, Processing |
| 19 | Specialty code(s) | Production, Processing |

STANDING LIST: VENDORS, JOBBERS, PRODUCING AGENCIES

| No. | Data Element | Source |
|---|---|---|
| 20 | Service code(s) | Processing |
| 21 | Name | Processing |
| 22 | Address | Processing |
| 23 | Code | Processing |

STANDING LIST: PUBLISHERS

| No. | Data Element | Source |
|---|---|---|
| 24 | Name | Collection Development |
| 25 | Address | Collection Development |
| 26 | Code (if any) | Collection Development |
| 27 | Previous name(s) | Collection Development |

## STANDING LIST: AUTHORITY FILES

| No. | Data Element | Source |
|---|---|---|
| | Name Authority File | |
| 28 | name | Processing |
| 29 | birth & death dates | Processing |
| 30 | book number(s) on which name appears | Processing |
| 31 | see references | Processing |
| | Narrator Authority File | |
| 32 | narrator name | Processing |
| 33 | studio code | Volunteer list |
| 34 | see references | Processing |
| | Subject Authority File | |
| 35 | term | Processing |
| 36 | references: use for, broader term, see also, etc. | Processing |

# APPENDIX F

## AUTOMATION OF RELATED AREAS

This Appendix consists of those areas of operation within DBPH that are to be considered for automation in the future. The initial effort to obtain bibliographic control will continue to have the highest priority. The following topics should be analyzed and implemented as time, funds, and resources permit.

### I Reference

A. The Reference Section is responsible for the development of the Division's collection of print materials on all aspects of blindness and other physical handicaps, as well as the maintenance of the Division's archives. With this collection and materials through other divisions of the Library of Congress, the Reference Section provides service to DBPH staff: the Library network serving the handicapped; professionals, researchers, students in the United States and abroad; and the general public.

Reference circulars, bibliographies, accession lists, fact sheets, and other compilations of information about the DBPH program or handicapping conditions, are prepared and distributed to interested individual and to libraries and organizations in related fields. In addition, statistics and other program information are collected and disseminated for use by DBPH staff and network participants.

B. Because of the level of intellectual effort required by many of the tasks assigned to the Reference Section, they do not lend themselves to automation. There are, however, a number of manual procedures that could be improved and a number of services that could be amplified by computerization and a systems approach. Specifically, the following areas should be addressed:

1. Study the use of a word-processing system for the production of responses to to inquiries and other items such as official lists of Libraries and directories, as applicable. This system is useful where repetitious actions, that can be done automatically, are involved.

2. Review of the present ordering procedures for reference materials, in order to allow interface with L.C. Order Division systems, as well as reduce the clerical effort and multiple forms presently required by the manual system.

3. Analysis and revision of the present serial ordering, cataloging, check-in, routing, and maintenance procedures to permit the use of automation and microforms where possible.

4. Collection and preparation of the Division's archieves for microphotographing, and investigation of the possibility of microphotographing other permanent documents with circulation potential.

5. Investigate acquisition of on-line searching capability of the most relevant commerical data bases.

6. Develop a system design and implementation plan for a computerized data base of material concerning blindness and other handicaps with provision for cataloging, selective dissemination of information, and distribution of relevant documents.

7. Develop a circulation system that will assist in the promotion and wider use of the Division's reference collection. (See also II-B and VIII-B)

8. Utilize reports produced to answer administrative functions (See Item IV) and research and development needs (See Item VI) in statistical studies, and adaptation of the system designed to produce these reports for statistical purposes, wherever possible.

It should be noted that the feasibility of DBPH undertaking any of the above specific activities will take into consideration existing services provided by other agencies.

II Music.

A. The Music Section of DBPH is the major national source for music scores, textbooks, and instructional materials for use by eligible readers in a variety of formats including braille, disc recordings, cassette and open reel tapes, and large print music.

Material in the Section's collection is loaned directly to users, and reference questions on all aspects of music are answered. As with the reading material provided by the Division, the music collection is enhanced by the addition of items produced by volunteers.

B. Particular types of activities in the Music Section are well suited to automation and should be investigated in conjunction with similar needs in other DBPH sections (See also I-B and VIII-B).

1. Investigate, plan, and implement steps necessary to develop a format for a data base of machine readable cataloging for the material in the Music Section Collections, including the upgrading of present cataloging records to conform to this standard.

2. Study the means of integrating technical processes activities into the overall technical processes system.

3. Develop a design and implementation plan for a circulation system in conjunction with **other** relevant sections of DBPH (see also VIII B)

## III Inventory Contol

A. DBPH provides both reading material and the equipment required to use the books and magazines. At present, a manual machine list is kept for phonographs and cassette players, giving the model, the model number, and quantity shipped to each library. In addition, a list of serial numbers is available for machines acquired in the last 2 years. Records kept for machine attachments give only the quantity of the particular accessory shipped to each library. DBPH maintains the nucleus of an inventory controll system for reading material in an "out" file of books shipped.

In order to fulfill auditing requirements, an inventory of machines, accessories, parts, office equipment and supplies must be maintained.

B. To better satisfy auditing requirements and the material control demands of the Division, the following items should be considered.

1. Develop a design and implementation plan for an inventory control system for equipment including machines, accessories, parts and consideration of machine-contract ramifications.

2. Develop and/or integrate into the machine system, if possible, an inventory system for books and investigate its interaction with a circulation system for reading material.

3. Develop and/or integrate the inventory of office supplies and equipment into an automated inventory system.

## IV Administrative Functions.

A. Cost accounting, budget preparation, monitoring available funds, planning, contracting, project status reports, mailing lists, and other related operations fall within the broad category of administrative funcions.

B. Although many administrative functions cannot be automated, the following areas should be studied.

1. Develop a design and implementation plan for a management information system including provision for regular, systematic reports as well as special reports on demand. The capabilities of the DBPH bibliographic system should be utilized whenever possible.

2. Develop a system to produce mailing labels for individuals, libraries, organizations, etc. in any quantity and any combination of desired selection criteria, with a capability for rapid turnaround.

## V Volunteer Activities.

A. The Production , Volunteer Training, and Volunteer Utilization sections organize and tap a nationwide network of trained narrators, monitors, braillists, proofreaders, and equipment specialists, who donate their time reproducing books' and music and repairing equipment.

The several sections keep various card files containing basic information such as name, address, and telephone number, in order to facilitate equitable assignment of work.

B. Since volunteers are essential to the production cycle and, therefore, to the bibliographic system, volunteer profiles should be kept. An automated system for storing these records should be developed that contains information such as name , address, organization, skills, current projects, etc., and allows for retrieval through various access prints and their combinations.

## VI Research and Development.

A. Research and development projects are carried out in a number of areas such as equipment, reader characteristics, media, planning, and automation.

B. Although actual research and development projects are not necessarily "automatable", they can be monitored through the management reporting system described in Section IV, Administrative Functions.

## VII Publication and Information.

A. The DBPH Publications Office plans the publications programs for the Division, determining priorities according to current needs of the Division and cooperating libraries. At present, all of the copy preparation and other pre-composition work is accomplished manually. In addition, a liaison officer from the L.C. Information Office assists in preparation and dissemination of media releases for the Division.

B. There are several ways in which automation could assist in the activities involved.

1. Employ existing text-editing systems to prepare and store appropriate publications material.

2. Study the potential for computer composition of publications material.

3. Investigate the possibilities of editing annotations of DBPH materials to suit specific publications requirements.

VIII Direct Service

A. The Resources Coordination and Collection Maintenance Units are currently responsible for circulating braille directly to readers in four states and requested items to libraries throughout the country. At present, this is a completely manual operation involving the use of manual "out" and reserve files.

B. Although implementation of the new bibliographic system will undoubtedly alter the character of work in the Resources Coordination Unit, it will still be necessary to supply books to libraries in conjunction with the Collection Maintenance Unit. To assist in this effort, the following should be addressed.

1. Design and implement a circulation system including provisions for machine-aided check-in/check-out and compilations of statistics. This system should utilize the overall bibliographic system, where possible.

2. Investigate the potential of machine-readable labels to speed circulation.

IX Miscellaneous Documents

A. There are various documents that are used across organizational and functional boundaries. Examples are draft versions of publications and standards, contracts, operational procedures, and committee reports.

B. Since all of these documents require development, input, and review from a variety of sources, a system should be investigated that will allow the parties involved to access all appropriate management, statistical, and bibliographic data. In addition, a text-editing system should be available that will allow documents to be constructed from all available data.

## GLOSSARY OF SPECIAL TERMS

| | | |
|---|---|---|
| 1. | Accuracy | The degree of freedom from error. Calculations herein are 95% accurate to + or - 2 standard deviations based upon randomly-gathered samples. |
| 2. | Annotation | A note that describes, explains or evaluates. DBPH produces annotations as concise abstracts of books with the aim of conveying approximate plot information and author's credentials. |
| 3. | Author | The writer or equivalent originator of the book as expressed under acceptable cataloging rules. When the author is used as the "main entry", the complete bibliographic and annotation information is listed under the author name. |
| 4. | Authority File | List of names, terms and references used in the Catalogs of the Library. |
| 5. | Batch Mode | A system approach to processing where similar data to be processed (input terms) are accumulated for processing during the same time on the computer. Also called batch processing. Also called off-line processing. |
| 6. | Book Catalog | A list arranged systematically, of all documents within a specific Universe with sufficient description to afford access. Herein, the book catalog can be on paper (sometimes called "hard copy") or on microform. |
| 7. | Book Number | A combination of letters and figures which serve to identify a specific physical item or container and to place those items in order. |
| 8. | Camera Planetary | A type of microform camera in which the document being photographed and the film remain in a stationary position during the exposure. The document is on a plane surface at the time of exposure. |
| 9. | Camera, Step and Repeat | A type of microform camera which can expose a series of separate images on an area of film according to a predetermined format, usually in orderly rows and columns. |

## GLOSSARY OF SPECIAL TERMS (cont'd)

| | | |
|---|---|---|
| 10. | Class Number | A series of numbers or letters and numbers indicating the class to which a title belongs. Herein, two library classification systems are considered: (1) LC Classification (LC) and (2) Dewey Decimal Classification (DDC). |
| 11. | Collation | That part of the catalog entry which describes the work as a material object, enumerating its volume, pages, size, and other physical dimensions. |
| 12. | COM | (1) Computer Output Microfilm: Microfilm containing data produced by a recorder from computer-generated electrical signals. (2) Computer Output Microfilmer: A recorder that converts data from a computer into human readable language and records it on microfilm. |
| 13. | Contents | Subject matter, such as chapter headings, titles of poems, short story titles, etc., specifically identified in a catalog entry. |
| 14. | Copyright | The exclusive privilege of publishing and selling a work, granted by a government to an author, composer, or artist, etc. Copyright date is the date granted. DBPH must obtain permission from the copyright holder to produce any material. |
| 15. | Core Memory | A form of high speed internal memory based on magnetized toroids (magnetic cores) for storage of individual binary digits. |
| 16. | CPU | Central Processing Unit. The unit of a computing system that performs calculation and/or makes logical decisions based on a man-made program of operational instructions. |
| 17. | Data | A general term for the symbols used to refer to or describe an object, idea, condition, situation or other factor. |
| 18. | DBPH Control Number | The uniquely assigned number to identify a book from the time it is acquired in print form until it is produced in tactile or record form. |

## GLOSSARY OF SPECIAL TERMS (cont'd)

| | | |
|---|---|---|
| 19. | Dewey Number | The specific decimal number assigned to a book under the Dewey Decimal classification scheme. |
| 20. | Diazo Material | A slow, inexpensive print film that is sensitized by means of diazonium salts. An image is developed on this film after exposure to light which is strong in the blue or ultraviolet spectrum. Can be developed using inexpensive equipment located in any room without special lighting or controlled environment. |
| 21. | Disc | A storage device consisting of magnetizable surfaces on a phonograph record-like disc. Quickly-accessible segments can be brought into core for processing. |
| 22. | Duplicate | (1) In microcopying, a copy made from a "master fiche" or an intermediate called a "working master". (2) To make multiple documents. |
| 23. | Entry | (1) A record of a document in a catalog, index or list.<br>(2) A posting. |
| 24. | Fiche | Shortened form of microfiche, a sheet of microfilm (105mm X 148mm) containing microimages in a grid pattern and a heading (inscription placed at the top to identify its contents which can be read without magnification). |
| 25. | Frame | Used herein as a representation of a document or other information source produced by a camera, reduced to a size too small to be read without magnification and placed on a microform. |
| 26. | Hard Copy | The printed copy of machine, computer or system output, e.g., printed reports, listings, documents, enlarged microimage, etc. |
| 27. | Hardware | The machine aspects or physical equipment such as the computer, terminal, printers, etc. |
| 28. | Heading | The word, name, or phrase at the beginning of an entry to indicate some special aspect of the book (authorship, subject content, etc.) and bring associated material together in the catalog. |

## GLOSSARY OF SPECIAL TERMS (cont'd)

| | | |
|---|---|---|
| 29. | Holdings Statement | The material location information in the catalog entry. |
| 30. | Index | A file of entries in an organized arrangement (author, title, subject, etc). The index is smaller (and more manageable) than the collection itself, contains less than full bibliographic data on items listed, and grows less than the total collection itself. |
| 31. | Index Entry | The part of an index which covers a specific index term or item. |
| 32. | Item | (1) Designates a discrete microfiche card. (2) A reference to a document or a specific entity. |
| 33. | Library of Congress Classification Number | A specific letter-number combination assigned to a title under the LC classification scheme. |
| 34. | LUMP | Library Union Monthly Processing file (DBPH acronym). This file contains all known books in the process of being completed or under consideration for this program during the last 5 years. |
| 35. | Main Entry | A full catalog entry, generally arranged by the author entry (if there is one, and by title entry if not) giving all the necessary information to identify the specific item. |
| 36. | MARC | MAchine-Readable Catalog (Library of Congress acronym). |
| 37. | Master Fiche | The original microimage from which copies are made. These copies are then called "working masters". |
| 38. | Microfiche | See "Fiche". |
| 39. | Microfilm | A fine grain high-resolution film containing images greatly reduced in size from the original. The film is usually 16 millimeters wide. Sometimes 105-millimeter film is used and cut into a card form called microfiche. |
| 40. | Microform | A generic term describing any miniturized form containing microimages. Examples, microfilm and microfiche. |

## GLOSSARY OF SPECIAL TERMS (cont'd)

| | | |
|---|---|---|
| 41. | Narrator | The term describing the person making the recording of a book on discs or cassettes for use by patrons. |
| 42. | On-Line | Data is entered into the computer directly from the point of origin and/or exit directly to their destination. |
| 43. | Peripheral Equipment | Equipment which is not under direct control of the central processing unit; also refered to as auxiliary equipment. Primary examples are terminals and printers. |
| 44. | Producing Agency | The organization responsible for producing a book or periodical used by DBPH from the original master reproduction. |
| 45. | Program | See "Software". |
| 46. | Publication Statement | Contains the year material was produced (publication date) and the person or corporation issuing the book (publisher). |
| 47. | Reader | In microfilming, the projection device for viewing an enlarged microimage with the unaided eye. When the device can also produce an enlarged image on suitable paper, it is called a "reader-printer". |
| 48. | Reduction Ratio | A measure of the number of times a given line or dimension of an object is reduced when photographed, expressed as 24X, 42X, 48X, etc. |
| 49. | Resolution | The ability of optical systems and photo-materials to render visible fine details of an object; a measure of the sharpness of an image usually expressed as the number of lines per millimeter. |
| 50. | Software | The totality of programs and routines used to extend the capabilities of computers. |
| 51. | Subject Heading | A word or group of words describing the content of a book. All material to which a particular heading had been assigned is entered under that heading. DBPH uses LC Subject Headings to the greatest possible extent. |

## GLOSSARY OF SPECIAL TERMS (cont'd)

| | | |
|---|---|---|
| 52. | Term | (1) A word used in an index. (2) A description attribute, parameter or concept to describe an item for the purpose of storing it in, or retrieving it from, a storage and retrieval system. |
| 53. | Terminal, Display | The point in a system or communications network at which data can enter or leave. Instead of printing input/output, it is displayed on a Cathode Ray Tube (CRT) just like a television screen. |
| 54. | Terminal, Hard Copy | Same as above except paper is used to capture input/output. |
| 55. | Title Entry | The record of a work in a catalog when found under the title. Where no author is present this also can become the "Main Entry". |
| 56. | Union Catalog | An orderly compilation of holdings of DBPH, network libraries and participating organizations, presumptive of cooperation (as seen with interlibrary loan agreements) between the parties involved. |
| 57. | Update | To make changes to current information and delete obsolete information in a master file. |
| 58. | Volume | A book distinguished from other books or from other major divisions of the same work by having its own inclusive entry. This unit may also be designated "part" by the publisher. |
| 59. | Working Document | The initial DBPH book catalog containing only press Braille and recordings produced under contracts for distribution to all network libraries. This document will eventually be replaced by the DBPH Union Catalog. |
| 60. | Working Master | The intermediate microform from which distribution copies are made. |